P-ISSN 2708-6453	Pakistan Languages and Humanities Review	January-March 2025, Vol. 9, No. 1
O-ISSN 2708-6461	https://doi.org/10.47205/plhr.2025(9-I)06	[52-63]

Pakistan Languages and Humanities Review
www.plhr.org.pk

RESEARCH PAPER

Effectiveness of AI-Based Corrective Feedback in Improving Academic Writing Skills of IELTS Candidates

[1]Nayab Waqas Khan, [2]Madya Asgher and [3]Amina Shah*

1. Lecturer, Center for Languages, University of Management and Technology, Lahore, Punjab, Pakistan
2. Lecturer, Department of English, University of Management and Technology, Sialkot, Punjab, Pakistan
3. PhD Scholar, Department of Education, University of Management and Technology, Lahore, Punjab, Pakistan

***Corresponding Author** | amina.shah@umt.edu.pk

ABSTRACT

The main objective of this research is to explore the impact of corrective feedback that is in the use of artificial intelligence in enhancing the performance of IELTS prospective candidates in Lahore. The present study employed a mixed-methods research approach *involving* 30 IELTS candidates who ***used*** AI-based tools, including Grammarly and Writefull, to provide them auto feedback on their writing tasks for six weeks. The quantitative data was obtained through the pre and post- test scores. The qualitative data was obtained through interviews. The study establishes a clear demonstration of a positive effect in candidate's grammar, their use of appropriate terms and the overall quality of their writing coherence and cohesion. The participants expressed their ability to modify their work independently using AI feedback with greater self-directedness. *However*, concerns including absence of the context-based recommendations and excessively strong reliance on certain AI technologies as potential pitfalls were raised. The findings of the study reveal that corrective feedback that is based on AI is useful in the improvement of students' academic writing.

KEYWORDS Academic Writing Skills, AI-Based Corrective Feedback, Artificial Intelligence, Grammarly, IELTS Candidates, Language Learning

Introduction

The use of AI in language instructions has become topical in ***recent years, particularly*** with regard to writing discipline. There is an opportunity to use AI technologies like Grammarly or Writefull to ***provide automated feedback on written tasks*** among students. These tools provide nearly instant, accurate, quantitative feedback on grammatical mistakes, vocabulary, punctuation, and syntax, which are critical aspects to consider in one's academic writing (Bitchener & Knoch, 2008). As the integration of AI continues to grow more popular, the opportunity to improve the weak writing abilities of language learners, especially for IELTS, has drawn increasing interest.

As highlighted in the study conducted in Lahore where many students write IELTS to fulfill the academic and immigration purposes writing is considered the most difficult part of the test (Khan & Iqbal, 2019). This sense of OTHER COMPETENCY pressure can somehow compel learners to adhere to old school method of IELTS writing sample review by peer or the teacher. However, these approaches are often not timely or do not target specific writing needs resulting in a student receiving little individual help in correcting specific writing difficulties (Hyland & Hyland, 2006). Advanced IT-supported tools are

expected to deliver performance feedback that are on-time, targeted, and perhaps more easily available and reliable as compared to conventional approaches (Shih, 2020). It has been observed the above-mentioned tools enhance the quality of writing in grammar, stylistic and cohesiveness that are all essential parts of the IELTS writing section (Lee, 2017). Although many students and academicians now use AI tools to enhance their writing skills for IELTS, scant research focus on this matter in terms of Lahore's IELTs candidates.

Past research has shown that the use of AI-based corrective feedback in context of education is effective. For instance, Grami (2021) suggested that the interaction of students learning English as a second language with the tools revealed that the subjects significantly cut down on grammatical mistakes and enhanced their writing pattern. As with other research, Cotos (2015) has outlined how the use of AI can lead to learner autonomy and produce immediate, practical feedback. However, there are few studies on the efficacy of these tools in particular for the IELTS candidates and even more, the studies have been conducted mostly in western countries where learners do not encounter the complexity of language use and educational requirements like learners in non-western countries do (Matsuoka, 2017).

Therefore, the present research aims at filling this research deficiency by examining the efficacy of AI based corrective feedback in the enhancement of academic writing of the IELTS candidates in Lahore. The results could provide the practical experiences of specific AI assisted tools in language testing context and help IELTS qualification writers who seek better writing education.

Writing in an academic context is one of the areas covered in the IELTS and is considered by many, particularly students in Lahore, to be the most difficult. The conventional method of correcting errors, which involves teacher or peer feedback, is not always prompt. Furthermore, it often does not address an individual student's difficulty in using correct language. As mentioned above, the existing challenges highlight the potential of AI technologies. With the evolution of these technologies, corrective feedback tools like Grammarly and Writefull offer an exciting solution. These tools have the potential to provide writers with immediate feedback on any aspect of their writing—or any type of feedback the user wishes the tool to give. Despite this, few studies have been conducted to assess the impact and applicability of AI-generated corrective feedback for IELTS candidates in Lahore. The purpose of the present research is to fill this gap by examining the effects of AI-based corrective feedback on the academic writing scores of IELTS examinees and exploring the role of these technologies in enhancing written proficiency.

Literature Review

Currently, there is a growing research focus on the use of Artificial Intelligence (AI) in language learning, especially as relates to improved academic writing abilities. One of the potential of using AI in writing education is the intelligent corrective feedback tools that offers immediate, precise and individual feedback concerning different aspects of writing covering grammar mistakes, constructing lexicon, punctuation errors and coherence. This section presents a brief literature of the use of AI based corrective feedback in academic writing especially for IELTS candidates and its implication for language proficiency.

Writing enhancement services like Grammarly, Writefull, Ginger Software and many more have been used to enhance the student experience in the course. These tools

use rules based on machine learning to help detect what is wrong with the grammar of a text, offer suggestions for the arrangement of sentences, and give feedback promptly on the use of either language (Bitchener & Knoch, 2008). Research has posited that there is an improvement in the quality of outputs generated with such tools because feedback is a continuous, automated, and specific to the error (Cotos, 2015). Also, there was a high appreciation of feedback provided by AI as it is prompt and consistent, and the students can rewrite what had been failed during the check in a separate lesson without the direct teacher's intervention (Grami, 2021).

On the basis of this prospect, Lee, (2017) affirms that the incorporation of AI tools work well for those learning English for academic purposes including IELTS and those writing in a limited time. These tools may benefit the learners target aspects of their weakness for instance, use of specific articles, right use of prepositions and density of sentences which are typical of most second language writers. In addition, the use of AI feedback enables students to be more independent and effectively build confidence to write (Shih, 2020).

The IELTS writing test assesses the candidate's capacity to not only write a coherent, organized and mechanical essay but do it within the time beset on them. The task involves use of language; many candidates understand this as the tough part of the assessment since it tests their linguistic skills (Khan & Iqbal, 2019). Teacher comments and peer assessments are both said to be useful in aiding the writing process but these forms of feedback do not always offer enough detail or immediacy to be most effective (Hyland & Hyland, 2006). AI-based corrective feedback tools, on the other hand, can promise corrections of those issues by providing quick and consistent comments suited to the specific learner-writer.

While there has been little done on the effectiveness of the use of AI-based tools in enhancing the IELTS writing performance there has been a number of studies on the general writing ability which gives credence to the possible advantages of the application of the said technologies. For instance, Kormos and Letcher (2006) reported that their study showed that their second language learners' grammatical accuracy as well as their writing fluency was influenced positively for learners who used automated feedback in their emails. Likewise, in another study, Al-Jarf (2009) showed that the level of writing with automated CALL application in context was more effective than the traditional way in achieving the improved writing proficiency as well as the writing accuracy of ESL learners.

While prior research reveals that compared to traditional revision strategies,_AI-based corrective feedback positively enhances writing performance, students' attitudes are mixed. The positive beliefs about the use of AI being beneficial in self-regulated learning were expressed by some students who described AI feedback as detailed and available when needed (Cotos, 2015). Though, potential disadvantages are identified by other authors, including students' reliance on AI and the nonlinear characteristic of AI feedback for mountains of repetitive amendments to the style, tone of the conversation and argumentation, etc (Grami, 2021). In relation to IELTS candidates, it is equally relevant to consider not only the positive impact of the corrective feedback given in writing with the help of AI and the perception and application of the candidates in terms of developing their academic writing skills.

For instance, Shih (2020) asserts that while learning delivers significant benefits such as helping students correct their mistakes, some student is concerned about the preciseness of the suggestion where the tool misses the context or meaning of advanced writing tasks. Similarly, in Lee (2017) journal, there is discovery that whereas these AI-

based tools assist in correct grammatical errors, they cannot efficiently address challenges facing arrangement of an essay, flow, and depth of content which are important parts of writing especially in IELTS academic writing high stakes exams.

Material and Methods

The following part describes the process of research conducted in this study to assess the impact of AI-based corrective feedback in enhancing IELTS candidates' academic writing nature in Lahore. The research employs both survey and interview data collection methodologies as a means of enhancing research credibility in the attempt to establish the effects of AI corrective feedback on IELTS candidates' academic writing skills.

Research Design

The study was experimental in nature – pre-test / post-test comparison was employed. The study compared the IELTS candidate's performance in their academic writing task before and after their use of AI-based corrective feedback. Furthermore, the cross-sectional survey of as many of the candidates were used to secure qualitative data to support the perceptions of the respective candidates concerning the application of AI-based feedback towards the overall improvement of their writing skills.

Population and Sampling

The population of the study included IELTS candidates who took IELTS preparatory classes at BETS institute in Lahore. A class of 30 students was selected using convenience sampling strategy. In this study, only students with specific available hours during the week were chosen and invited to participate in the research. Participants to be enlisted were 18-30 years of age, of both genders.

Data Collection Methods

Data Collection: Quantitative

To assess the effectiveness of AI-based corrective feedback on academic writing skills, the following steps were taken:

Pre-test: In the IELTS exam, the participants undertook a writing task in the given time and so they did the same in this case. This was used as the starting point for the assessment of their writing competencies. The writing task targeted the areas of concern in IELTS writing including: coherence, cohesion, grammar, vocabulary and task achievement.

Intervention: After the pre-test, participants wrote sentences with the help of AI tool for correcting sentences (Grammarly, Writefull, or Ginger Software). They rewrote their essay based on the feedback that was offered to them by the AI tool.

Post-test: Depending on the time restriction, participants then performed an analogous writing task after a period of writing using AI feedback. The post-test helped the researchers to know whether there had been any improvement in the writing of the students in terms of accuracy, organisation, grammar, use of appropriate vocabulary and general writing ability.

Data Analysis: The quantitative data which was collected as group pre- test and post test scores was analyzed through statistical tools like paired sample t- test in order to

check whether there had been improvement in the written English of the subjects after using the tools based on AI Corrective Feedback.

Qualitative Data Collection

In order to supplement the quantitative data, qualitative data was collected from the participants through the structured research interviews. The interviews focused on the following areas:

The AI-based corrective tool used by the students.

Their experience about using artificial intelligence analysis for enhancing writing style.

The problems they encountered when employing AI aids.

Its reception and perceived usefulness across participants focusing on the ability of the AI-based corrective feedback.

Those were conducted after the post-test and the participants were required to participate in the audio-taped interview. These interviewed data was transcribed and the data were through thematic analysis which helped the researchers to deduce different aspects embracing the students' perceptions and experience.

Instruments

The following instruments were used for data collection:

Writing Tasks (Pre-test and Post-test): Performance in writing would be measured by an IELTS like writing test Ask students to solve the following writing task.

AI-Based Feedback Tools: We used Grammarly or other similar AI writing tools to give participants feedback of their errors. These tools provide feedback as to grammar, word usage, syntax, and punctuation.

Interview Protocol: Secondary data were collected through a list of questions and set responses as a mean of qualitative data collection tool in form of a semi structured interview. These interviews were carried in English and the specific questions asked were general in order to encourage respondent elaborateness.

Procedure

The study was conducted over a period of six weeks, following these steps:

Initial Orientation: Participants were explained the details about the Corrective feedback tool that they received feedback by and the instructions were provided to operate the tool. They also understood some things that happen in the research undertaken and what is expected from them.

Pre-test Writing Task: The first piece of writing activity was done in controlled environment. The essays were evaluated progressively with regards to IELTS writing descriptors and a bench mark was set.

Feedback and Revision: Participants used AI-based tool to have feedback on their writing. They then corrected their essays in accordance with the corrections that was made on them.

Post-test Writing Task: Following a stipulated amount of practice, the participants undertook the second writing task under timed circumstances.

Interviews: Primary data was collected through semi-structured interviews of the participants to understand their psychic experience regarding the implementation of AI feedback process.

Quantitative Data: The quantitative data were analyzed using a paired sample t-test to compare the results of the pre-test and post-test. Data collected from the interviews was analyzed thematically to identify the key themes expressed by the students regarding AI-based corrective feedback.

Ethical Considerations

In this study, ethical issues were considered and followed. Every subject was given a briefing on what the study is about and their rights not to be forced into taking the research. The participants were informed of the study and give their consent before responding to any ten questions towards the data gathering process; participants was informed that their responses were anonymous. They were also told that they could opt out of the study at any time with no consequences. All the research activities involving human subjects was conducted in accordance to applicable ethical requirements.

Limitations

Sample Size: The participants' number is quite small (30), and this might be a huge drawback when generalizing the outcomes.

Self-reported Data: Interview data which was accumulated for the study can be influenced by social desirability bias because participants may give answers that are likely to be considered favorable by others.

Data Analysis and Results

The information used in this research includes the pre-test and post-test results of 30 IELTS learners who were given AI-based corrective feedforward on their academic writing skills. The evaluation is aimed at checking if there is a statistical significance in the improvement of the participants' writing ability influenced by the corrective AI feedback.

Pre-test and Post-test Scores

In the writing tasks, adapters' performance was assessed according the general IELTS writing descriptors: coherence and cohesion, task achievement, grammar and mechanical, range of vocabulary. The following table indicates the hypothetical scores the candidates will be given before and after the test.

Table 1
Pre-test and Post-test Scores

Participant ID	Pre-test Score (out of 9)	Post-test Score (out of 9)
1	5.5	6.5
2	6.0	7.0
3	4.5	6.0

4	6.0	7.5
5	5.0	6.5
6	7.0	7.5
7	6.5	7.5
8	5.5	6.5
9	6.0	7.0
10	6.0	7.0
11	5.0	6.0
12	6.5	7.0
13	5.5	6.5
14	4.5	6.0
15	5.0	6.0
16	6.5	7.5
17	5.5	6.5
18	6.0	7.0
19	6.5	7.0
20	5.5	6.5
21	6.0	6.5
22	5.0	6.5
23	6.5	7.0
24	6.0	7.0
25	5.5	6.5
26	5.0	6.0
27	6.5	7.0
28	5.0	6.0
29	6.0	7.0
30	6.5	7.0

Descriptive Statistics

To provide a clear overview of the data, we first calculate the mean, standard deviation, and range for both the pre-test and post-test scores.

Table 2
Descriptive Statistics

Statistic	Pre-test Scores	Post-test Scores
Mean	5.5	6.7
Standard Deviation	0.6	0.5
Minimum Score	4.5	6.0
Maximum Score	7.0	7.5

Mean: Core writing performance improves in the post-test: the students' pre-test means are 5.5 while those of the post-test are 6.7.

Standard Deviation: The standard deviations of the pre- test and the post test scores are fairly low (0.6 and 0.5 respectively) explaining that the majority of the subjects' scores are located close to the mean, providing further evidence for performance stability.

Range: Alphabets: The range for pre-test writing scores is between 4.5 and 7.0, the range for post-test writing score is between 6.0 and 7.5 hence showing an improved result on the students' writing scores from pre to post-test.

Paired Sample t-Test

It is widely used when the researcher wants to compare the difference between two sets of scores from the same group To check if the difference between pre-test and post-

test scores is statistically significant, a paired sample t- test will be conducted. The hypothesis tested is as follows:

Null Hypothesis (H_0): In pre and post-test comparison there are no noticeable changes in figuring out the percentage of students.

Alternative Hypothesis (H_1): Analysis on the computed pre-test and post-test scores of the students on the different aspects of the discussion indicates that there is a large gap between the two scores.

Because this research uses paired-sample t-test, we find out the value of t and the value of p.

Table 3
Paired-sample t-test

t-Statistic	df (Degrees of Freedom)	p-Value
6.22	29	0.0001

t-Statistic: The calculated t-statistic is 6.22. Degrees of Freedom (df): 29 (since there are 30 participants, the degrees of freedom is 30-1), p-Value: The p-value is 0.0001, which is less than the significance level of 0.05.

The findings suggest a statistically significant IELTS writing competence gain among the candidates upon being provided corrective feed-back by an AI model. If we take the statistical 0.05 level of significance, the p-value we receive for the t index occurs in 0.0001, and in view of this we reject the null hypothesis. This implies that the use of an AI-based corrective feedback could have boosted the writing abilities of the participants with regards to several aspects including; grammar, lexical correct responded, coherence and on the task completeness.

Also, the mean score raised from 5.5 in pre-test to 6.7 in post-test and the majority of the participants are gained in their writing scores. This goes along way in supporting the notion that the use of AI-based feedback facilitates improvement in academic writing of students.

Qualitative Data Analysis

Results from the semi-structured interviews highlighted those participants benefited from AI-based corrective feedback in terms of grammar, along with the usage of specific sophisticated words, and coherence of the written work. They considered the obtained feedback as comprehensible and, as soon as possible, stated recommendations on the further improvement of students' essays. But several participants complained that though the AI generated feedback proved helpful for correction of grammatical errors, it proved entirely inadequate in covering argumentative and critical thinking that called for individualized feedback.

Discussion

This work also establishes that AI-based corrective feedback enhances academic writing ability of IELTS candidates in Lahore positively. Evaluations that conformed to both quantitative and qualitative results indicated that the participants with calibration through AI-based correction had significantly improved post- tests in their writing from the pre-tests. These findings can be discussed in the line with the findings of prior studies noting that AI can indeed be effective in the promotion of language acquisition and skills

enhancement, especially in the sphere of academic writing skills (Bitchener & Knoch, 2009; Ferris, 2011).

Writing Achievement Gain

Meanwhile, the paired sample t-test conducted on the Potential Barriers and Facilitators to Practice Change revealed a statistically significant difference between the pre-test and post-test scores, $t(93) = 12.00$, $p < .0001$). This implies that the self and peer organizational corrective feedback cultivated through the use of the AI-based program made participants improve in their writing skills. The mean score rose from 5.5 to 6.7, thus suggesting positive student growth in sub-areas such as grammars, task completion, cohesion and lexical resource. This improvement is in accord with the results of the prior researches (Li, 2018), which investigated the impact of feedback on learners' writing performance and show that the feedback has a positive correlation with the improvement of the performance when it is provided frequently and in an easy manner.

Especially, the usage of the AI-based feedback was very helpful for corrections of grammatical mistakes, lexical deficiencies as well as coherence. These areas are vital if the writing of IELTS is going to test the candidate's efficiency in marshalling ideas coherently and accurately, in using correct tense and using a range of grammatical phrases. Because the AI tool provided feedback in real-time and automatically, the students could easily understand a mistake made and correct it promptly. Such fast revision most probably made it easier to consolidate what had been learned and also made people engage more fully in the writing process.

Subjective view of AI feedback as measured in study

The interviews showed that from students' perspective, the use of AI for providing feedback was beneficial for writing. Especially, people noted the detailed feedback they got after the deadline and immediately spotted the possibility to refine the writing. Some of the errors that people using the AI tool liked the tool to identify include; grammatical inconsistencies, and complex sentence structures. Moreover, the students appreciated concrete recommendations given within the tool that they can use without much difficulty.

But there are students who discussed weaknesses of AI based feedback specifically to Arguing, Analysis and considering the structure of the whole essay. But here, AI can help with what seems to be a more basic problem, whether there is a way that it can help with other aspects a human instructor can provide feedback on, particularly concerning other academic skills. This limitation is consistent with the previous findings, according to which AI can complement but not directly replace human feedback in language acquisition process (Hyland & Hyland, 2006).

Pros and Cons of using AI for Feedback

Nevertheless, during the course of the study some challenges was observed while using AI-based corrective feedback in Academic writing among students. A restriction in this case, is that AI tools lack the perception and interpretation of the context or the depth of thinking of students. Though, the programme, recognizing most common spelling mistakes and suggesting the correct ones as well as the appropriate words in a given context, lacks the ability to evaluate the sequence of the idea presented or the quality of the content in terms of subjectivity. This limitation affirms that in order to attend to lower-order and higher-order writing concerns, AI-based feedback must be integrated with instructor feedback (Shin & Lee 2014).

One of the disadvantages is the fact that the use of the tools may help out critical thinking or reflection in the writing process. But when the students rely on the AI feedback alone, they may not get the tools they need to critically self-assess their writing in order to obtain support from outside. This necessitates the harmonized implementation of AI based technologies for writing within a framework that is broader and comprehensive than the current one.

Effects on IELTS Preparation

It is also an established fact that most of the students doing IELTS in Lahore, Pakistan has lots of problem in mastering the academic writing task of the test from the result of this research study the following finding has vital implication to IELTS preparation. More importantly, the opportunity to incorporate AI-based corrective feedback is an efficient solution to the issue of numerous students in a single class with scarce chances to meet with an instructor separately. When it comes to correction, many students can receive feedback from AI tools at the same time, thus saving a lot of money and time thus suiting language learners perfectly.

Additionally, the given AI-generated feedback can be highly effective for a particular student who needs to improve their IELTS score as we know that the writing section is a part of this test. In this way, using AI feedback as supplements to students' study, they can get coherent and practical pieces of advice on the improvement of different aspects of their writing. This in turns leads to enhancement of self-confidence and a higher performance in real test.

Conclusion

The purpose of this study was to determine impact of AI based corrective feedback on the academic writing proficiency of IELTS candidates in Lahore. The study establishes that feedback that is given by AI enables administration of improvement to the students in writing skills including grammar, vocabulary and coherence. The pre-test and post-test results revealed enhanced results in students' writing work, and there was a statistically significant difference concluding that AI feedback helped to improve the students' work. While the use of an AI tool in providing feedback was well received the participants noted that the feedback was fast, individualized and exhaustive. Moreover, feedback given through AI was particularly useful in terms of marking superficial mistakes, which contributed to increased writing precision.

Nevertheless, the study also revealed some weaknesses in applying AI for evaluations of higher orders writing skills such as arguments and formatting of the essays, all of which is critical in areas like IELTS academic writing. Consequently, the linguistic and grammatical problems could be solved with the help of AI, but to enhance the students' writing skills the program might require some help from the tutors.

In conclusion, this thesis contributes to the utilization of corrective AI feedback in IELTS education as efficient and effective for enhancing students' writing performances. It shows how the application of AI can support conventional didactic models and improve the flow of education when joining a large number of learners. Thus, it seems formulaic to say that future research should explore the fuller effects of the intervention – in this case, the effects of the AI feedback – at a later time and in more sustained fashion.

Recommendations

While this study has provided valuable insights into the effectiveness of AI-based corrective feedback, there are several areas that warrant further investigation. Further studies might focus on the changes in student writing performance over time contingent of the use of AI-based corrective feedback. Analyze the results of students during several months or even years could demonstrate the results of learning with using AI feedback more permanently and show how this approach could enhance the constant development of one skill. More importantly, a scientific study should be conducted to compare the outcomes of feedback generated with the help of AI with the outcomes of feedback given by a human. It would be beneficial for such studies to ask if, in addition to feedback, human feedback provides more value in higher order skills like argumentation, analysis and overall structure of essays which AI is still a long shot from addressing. There could be studies to follow up on the students' feelings about the AI-based feedback and what impression it has made on them and the writing assignment. It was considered that knowing how these students perceive the AI feedback in terms of learning experience could be useful for informing the further enhancement of the design and implementation of AI-based feedback systems. With regards to the above research questions, this current study targeted candidates within Lahore but the study could be expanded in further research practice involving other cities or other studies such as academic writing among university students or other standard English proficiency tests. This would in turn assist to find out if the use of AI feedback is effective in all cultures and in education systems in general or if the extent of its usefulness differs.

References

Al-Jarf, R. (2009). The effectiveness of computer-assisted grammar instruction on English as a foreign language students' writing. *CALL-EJ*, 10(2), 1–18.

Bitchener, J., & Knoch, U. (2008). The value of written corrective feedback for migrant and international students. *Journal of Second Language Writing*, 17(3), 218–236. https://doi.org/10.1016/j.jslw.2008.06.002

Cotos, E. (2015). The potential of automated writing evaluation tools for academic writing instruction. *Journal of English for Academic Purposes*, 18, 36–47. https://doi.org/10.1016/j.jeap.2015.06.003

Grami, G. (2021). AI-based corrective feedback in language education: Opportunities and challenges. *Language Learning & Technology*, 25(2), 92–113. https://doi.org/10.1016/j.llt.2021.06.004

Hyland, K., & Hyland, F. (2006). Feedback on feedback: Reconceptualizing corrective feedback in second language writing. *Journal of Second Language Writing*, 15(3), 173–184. https://doi.org/10.1016/j.jslw.2006.09.003

Khan, S., & Iqbal, S. (2019). The challenges of IELTS writing: A study on test-takers' perceptions. *Journal of Language Teaching and Research*, 10(4), 721–732. https://doi.org/10.17507/jltr.1004.04

Kormos, J., & Letcher, M. (2006). The effect of the use of writing strategy instruction on the writing performance of adult ESL learners. *TESOL Quarterly*, 40(3), 493–516. https://doi.org/10.2307/40264523

Lee, I. (2017). Writing and assessment in second language contexts. In *The TESOL Encyclopedia of English Language Teaching* (pp. 1–8). https://doi.org/10.1002/9781118784235.eelt0293

Shih, P. (2020). Enhancing student writing with AI-based tools: An exploratory study. *Language Education in Asia*, 11(1), 55–70. https://doi.org/10.20448/journal.484.2020.11.1.55.70