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The Implementation of Self-Monitoring in Writing: Analyzing the Form and Content of EFL Learners' Annotations

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Abstract

The self-monitoring technique, using the learners' annotations and teacher's response as its base, proved to be one of the beneficial alternatives for the traditional teacher feedback. Although some studies have been done on the effects of self-monitoring technique, more studies are still required to place this tactic at the forefront of educational practices. This study examined Iranian EFL learners' annotations in terms of their form and content. To this end, after homogenizing the participants, 30 university students were selected and received essay writing instruction employing the self-monitoring technique for eight sessions. The learners' annotations were gathered and classified in terms of their content and form based on the frameworks established by Sarabia, Nicolás, and Larios (2012) and Storch and Tapper (1996) respectively. The research results, as for the content of the annotations, evinced that the largest number of annotations fell into the categories of lexis and syntax, and to a lesser extent the discourse organization. Regarding the form of the annotations, most of the learners' annotations fell into the category of "a demand for the correction of an L2 form". The results of the chi-square test also showed that the difference in the content and use of language forms of annotations used by students was significant. Hence, the use of self-monitoring technique in writing courses brings a wealth of information regarding the writing content and problematic areas for both the teacher and learners as they can have discussions over the written text, making the process of writing more interactive.

Keywords: Annotation form; content of annotations; EFL learners; self-monitoring; teacher feedback; writing course

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1. Introduction

The skill of writing is considered as the cyclic process of the knowledge transforming in which the writer should cope with various problems such as motivational, cognitive, and linguistic processes (content and rhetoric) simultaneously, and it is used to construct new knowledge rather than just conveying it (Weigle, 2005). As Brown (2001) maintains, various competencies are required in the writing process and the final product involves planning, pondering, composing, and reviewing. Teaching writing also draws the learners' attention to the organization of ideas, maintaining cohesion and coherence, the use of discourse markers and rhetorical features, as well as editing and reviewing of the written product (Brown, 2001). Hence, the process approach concentrates on advancing the learners' writing skills through the stages of goal setting, planning, drafting, and revising (Hughes et al., 2019), which can be best achieved by means of different types of corrective feedback provided for the learners (Hyland, 2003).

Corrective feedback (CF) is defined as a type of feedback that acquaints the learners with the acceptable forms of a language, and it is used to correct the learners' errors to achieve linguistic accuracy (Eslami & Derakhshan, 2020; Ferris, 2012; Purnawarman, 2011; Storch, 2010). El Tatawy (2006) stated that corrective feedback is a means of getting attention, whose recurrent use is necessary to avoid fossilization. More importantly, teachers' corrective feedback on the learners' drafts is considered as a significant source of feedback (Nassaji & Kartchava, 2020, Phakiti & Isaacs, 2022), for it scaffolds the language learners' writing process (Hyland & Hyland, 2019; Zhang, 2018) and supplies an opportunity for them to regulate their performance in accordance with the comments (Carless, 2006) and promote their writing accuracy (Fathi et al., 2020; Fathi et al., 2021; Kim & Emelivanova, 2019). Moreover, the pedagogical purpose of the teachers, as Sommers (1982) believes, is to act as a reader, assisting the learners to turn into critical readers of their own work, which eventually helps them evaluate their work, gain control over the process of writing, and improve their writing skills.

Although corrective feedback is considered an indispensable part of the writing process, the form the feedback takes is of special significance (Ruegg, 2020; Storch & Tapper, 1996). A closer look at the literature reveals that different alternatives, involving teacher-students, were introduced to present more effective teacher feedback on the learners' writing. One of these alternatives is called the

self-monitoring technique proposed by Charles (1990), through which the students are encouraged to monitor their own written work by means of the annotations made in the margin of their writing before submitting their essays. As self-monitoring results in metacognitive monitoring and self-control, it is considered a fruitful approach to enhance strategy use and academic performance (Guo, 2022). According to Flower and Hayes (1980), the central part of the writing skill is the capability to monitor, track, and lead one's own writing process. If the students do not have a proper image of the task at hand, they will have difficulty in assessing their abilities (Dixon et al., 2020).

This self-monitoring technique in teaching writing is mainly based on the learners' annotations and the teacher's response, which provides the opportunity for the students and teacher to have a written dialogue. In this situation, the students can inform their teacher of the problems they encounter while composing their texts and the teacher will be able to offer effective feedback on the students' problematic areas. Therefore, the students can learn a lot from the teacher's responses because they directly address the students' concerns (Charles, 1990; Saunders, 2020). The main concern of the writers is their ability to generate ideas, construct the writing content (Graham & Harris, 2005), and maintain their writing and thinking process. The difficulties regarding form and content in writing (Makovskaya & Radjabzade, 2022) definitely affect the writing process, product, and quality.

To deal with writing complexities and difficulties, skilled writers take advantage of the self-monitoring mechanism as a metacognitive approach (Rafferty, 2010) to assist them in active writing engagement (Teng, 2020), staying on-task, and achieving their output and goals (Dougherty, 2018; Rock & Thead, 2007). These writers attempt to construct and evaluate their ideas, consider the lexical and syntactic features and organizational patterns of their text, maintain cohesion and coherence, and focus on the restrictions imposed by the topic and task achievement (Derakhshan & Karimain Shirejini, 2020). According to Ma and Teng (2021), the use of writing techniques enables them to negotiate the writing conventions and mechanics and concentrate on the text organization, form, and features. Since the self-monitoring technique highly relies on the learners' annotations, the focus of the present study was to examine the learners' annotations in terms of their form and content. In other words, this study aimed to find out what forms the learners' annotation take and what aspects of writing the

learners consider most. The research findings can serve as a basis for understanding the core components and uses of self-monitoring technique in writing, identifying the learners' writing concerns and problems, and presenting pedagogical solutions in written feedback provision mainly in the Iranian EFL context.

2. Literature Review

Self-monitoring as a technique in writing pedagogy was first introduced by Charles (1990). Charles states that through self-monitoring, the learners annotate their writings with some points, questions, and comments on their areas of difficulty prior to submitting their works to the instructor. This means that students write their comments, questions, and concerns in the margin of their writing and the teacher provides written answers to the students' notes (Cresswell, 2000). The self-monitoring technique has been developed to establish a dialogic interaction over the students' writing, and it is especially useful for circumstances in which the institutional constraints do not allow individual face-to-face discussion between the writer and editor (Charles, 1990).

Prior studies have also noted the significance of in-class discussions through teacher mediation, scaffolding, and feedback as well as with peers in a dialogic manner and interactively, which can all enhance the learners' task-oriented self-monitoring and self-regulation (Carless & Chan, 2016; Carless et al., 2018; Hawe & Dixon, 2017). This technique aids the learners to figure out the problems on which they need to receive help. It also helps the students to express their personal concerns and doubts, which may be different from the teacher's focus, thus, the feedback can be more effective.

As for the annotation technique, Cheong (1994) states that annotation is an alternative way for providing feedback by means of which "one makes comments in the form of notes on ones' own or another's paper" (p. 64). Cheong considers annotations as a method of providing beneficial feedback in some ways. In the case of peer annotations, when the comments have been written down, the novice writers can refer to the notes whenever they feel they need them (Cheong, 1994). Moreover, as indicated in the study by Arndt (1993), students prefer to receive written feedback, for they believe it is face-saving.

Concerning the annotations made by the novice writers, it has been pointed out

that by using written annotation the responsibility of recognizing errors, which is perceived as the teachers' main duty, is transferred to the writers. Johnson (as cited in Cheong, 1994) believes that as the students make annotated questions about their uncertainties and problems during composing, they are willing to receive feedback on the points that they have experienced difficulty. Further, when it comes to language learning, Johnson affirms that when the learners are engaged in the process of identifying the problem and finding solutions, their awareness may be raised and their competencies in foreign language can improve.

Some scholars have been mostly concerned about the learners' perceptions and attitudes toward the use of self-monitoring technique through annotations and focused their studies on assessing the learners' view regarding the use of annotations in the writing classes. They sought to find out whether the learners' annotations were helpful to them, and if so in what aspects they have been beneficial. To exemplify, in a study conducted by Cresswell (2000), it was revealed that the learners perceived the self-monitoring technique as valuable, for they believed that it gave them a high degree of independence. Moreover, the learners in the study showed their willingness to use this technique in their subsequent writing tasks. However, some students preferred teacher feedback to be informed about all linguistic errors and not just annotated problems. Furthermore, Cresswell (2000) was concerned about the effectiveness of the learners' annotations. According to this author, in providing annotation, learners might dedicate their focus to the surface-level language problems such as grammar and vocabulary, and they were likely to leave the global aspects, such as organization and content, unnoticed. Another concern was whether or not the learners were able to express their doubts and uncertainties regarding the linguistic and content difficulties of their writing. He suggested that by training the self-monitoring technique, these problems could be avoided.

Considering the role of annotation in language learning, Storch and Tapper (1997) believe that the teachers may encounter difficulty in providing appropriate feedback because they may not have a clear understanding of the learners' intention. They suggest that if the students let the teacher know beforehand what they feel about the different aspects of their writing, i.e. if they feel satisfied with it or what their worries have been during writing, they may receive beneficial feedback addressing their specific concerns. As Storch and Tapper (1997) state, the technique of using the learners' annotations can inspire the students to critically

appraise their written product. The technique of asking learners to make commentary notes on their own writing, not only motivates the learners to take the role of a reviewer of their own writing but also enables the teachers to provide an appropriate response (Charles, 1990).

Besides that, a study conducted by Xiang (2004) revealed that the use of the learners' annotations is beneficial for improving the organization of compositions. Similarly, Cresswell (2000) concluded that the use of the learners' annotations was effective in promoting the learners' ability to express their concerns, as well as paying attention to the content and organization of their writing. By reviewing the studies focusing on the learners' annotations, it is evident that annotations have been grouped differently in such studies and by various scholars. Regarding the types of annotations used in the self-monitoring technique, Xiang (2004) carried out a study in which he examined the types of learner-generated annotations and have grouped them into three categories: content, organization, and language form. The findings of the study evinced that learners, especially high achievers could benefit from the self-monitoring technique to advance the organization of their written texts. It was also revealed that among the participants of the study, high achievers (language proficient learners) were the highest in annotations on content and the lowest in annotation on the form. On the contrary, low achievers (low-proficient language learners) showed the converse result.

The students' annotations were analyzed in another study by Sarabia et al. (2012), and as a result the annotations were arranged into six categories: demand for a translation, rectification of a translation, providing the correct L2 form, specifying the right alternative, restructuring of the remark, and a blanket request. This research also revealed that the most frequent annotations were those provided on lexis, followed by syntax, spelling, punctuation, discourse, and topic. Similarly, most of the instructors provide learners feedback on spelling, organization, and grammar (Seker & Dincer, 2014).

In their study, Storch and Tapper (1996) investigated the types of annotations used by the learners in their journal writing in an advanced English as a Second Language (AESL) course. As to the forms of the annotations, the analysis indicated that annotations could be categorized into six main groups: Asking for correction, identifying the right alternative, blanket request, demand for more information, restructuring of the remarks, among others. Additionally, considering the content of the annotations, four major categories were found: syntactic, lexical, discourse

organization, and ideas. Despite plenty of individual variation, syntax and lexis were seen as the most frequently used annotations.

Several studies have also attempted to show that self-monitoring has been a beneficial teaching technique in writing (Cho et al., 2010; Dougherty, 2018; Hawe et al., 2019), and various skills, strategies, and techniques were proposed to develop the learners' ability to monitor and regulate their performance, like the use of exemplars (Hawe et al., 2021), checklists (Arslantas & Kurnaz, 2017), journals (Nückles et al., 2009), learning protocols (Lan, 1996), note-taking (Kauffman et al., 2011), and standardized diaries (Bellhauser et al., 2016). However, there is a paucity of research studies on the students' types of annotation and the need for conducting further research in this area is felt mainly in the Iranian context. Therefore, this study aimed to bring into focus the aspects of writing that concern the Iranian university EFL students the most, for this technique is highly based on the learners' annotations which can assist learners in better organizing and communicating their views and preferences. The major types of annotation used by the learners were investigated in terms of their form and content. Accordingly, this study particularly intended to address the following questions.

1. What aspects of writing do Iranian intermediate EFL learners concentrate on while annotating their own written texts?
2. What form do Iranian intermediate EFL learners' annotations take when they annotate their own written texts?

3. Methodology

3.1. Participants

The participants of the study were drawn from a total population of 40 Iranian undergraduate English learners taking the essay writing course at a state university in Tehran, Iran. To homogenize the participants, a retired version of TOEFL PBT (Test of English as a Foreign Language, Paper Based Test) was administered at the outset of the study to ensure that all the students were at the intermediate level of proficiency. Therefore, those students, whose mean scores were within the range of one standard deviation above and below the mean, were selected and the remaining students, considered as the outliers, were opted out. In total, 30 participants were found eligible. The final sample was a group of 30 female and male students aged

between 20 and 28 years old. All the participants were Iranian and L1 speakers of Persian. The group received writing instruction to implement the self-monitoring technique for eight sessions during one course of essay writing.

3.2. Instrumentation

In this study, some instruments were used to collect the required data, such as a TOEFL PBT test as well as the self-monitoring open-ended questionnaire.

3.2.1. TOEFL PBT

To ensure the proficiency level of the students participating in the study, a retired version of the TOEFL PBT (ETS, 2004) was administered at the outset of the study. All the participants were required to take the test, and they were selected based on their TOEFL test scores. Owing to the time restriction of the course and focus of the study, only two sections of the TOEFL PBT test were administered: reading, and structure, written expressions. The reading comprehension section consisted of 50 items, organized into five passages, each of which was followed by several multiple-choice questions. In this section, the students were asked to select the best possible answer out of a set of options. The time allotted to this part was 55 minutes. The next section focused on the language structure and written expressions. This section included 40 items and was designed to measure the students' ability to recognize the language that is appropriate for the standard written English. Questions 1-15 were incomplete sentences, and the students were required to choose among the four options, the one word or phrase that best completes each sentence. In addition, from questions 16 to 40, each sentence had four underlined words or phrases. The students were asked to identify the one underlined word or phrase that must be changed for the sentence to be correct. The time limitation for the structure and written expression part was 25 minutes.

3.2.2. Writing Practice Tests

During this study, the participants were presented with various writing tests selected from among the ones employed in the IELTS (International English Language Testing System) general writing task. They were asked to write essays, entailing at least 250 words in 40-50 minutes, and annotate their writing difficulties. To rate the

students' essays, the IELTS writing marking scheme was used with scores varying from 1-9 on different aspects of the writing: Task achievement, coherence and cohesion, vocabulary, lexical resource, grammatical range, and accuracy. Besides that, some important factors were considered in the process of rating the learners' essays, such as the content relevance, logical support and organization of ideas, as well as the proper use of discourse markers, unity, cohesion, and coherence. To ensure rater consistency, the inter-rater and intercoder reliability were measured.

3.3. Data Collection Procedure

This study sought to find the types and forms of annotations used by the students in their writing. To this end, the students were asked to write an essay in 40-50 minutes every session and keep track of the essay word count. The writing topics and prompts were chosen from those used in task 2 of IELTS general writing module. During the eight sessions of writing instruction, the teacher explicitly trained the learners on how to use the self-monitoring technique and set specific goals. Then, the students were asked to make annotations about their writing problems in the margin of their assignments. Likewise, they were asked to develop an evaluation chart and record their writing difficulties and problematic areas and the word count on the chart so that they could compare their written product and performance with the ones developed previously. Meanwhile, the teacher also monitored the students' use of the self-monitoring technique by holding regular conferences with them to direct and monitor their progress as well. A total of 147 annotations were found in 200 essays written by the students during the eight experimental sessions. To establish a detailed classification of the annotations, the students' essays were gathered to examine the form and content of the annotations presented in their writings. To do so, the students' annotations were categorized in terms of their content based on the classification established by Sarabia et al. (2012). Likewise, the annotations made by the students during the eight sessions using the self-monitoring technique were examined and categorized in terms of their form based on the framework established by Storch and Tapper (1996). Following the mentioned frameworks, inter-coder reliability was measured for the forms and content of the learners' annotations. To ensure the credibility and trustworthiness of the codes, 25% of the codes were examined by another coder who was an IELTS examiner and expert in the domain of Applied Linguistics. The

researcher provided the coder with explanation regarding the frameworks employed in this study and the codebook. Based on the results, for the coder's checking of 25% of the codes, inter-coder agreement coefficient of 96% was reached. To analyze the data, the frequency count, percentage, chi-square test was used by means of the SPSS (Statistical Packages for the Social Sciences) version 21.

4. Results

4.1. Aspects of Writing in EFL Learners' Annotations

During the course of essay writing, the 30 students participating in the study were required to annotate in the margin of their essays. To this end, the content of the students' annotations was examined to determine those aspects of the learners' writing which received the higher number of annotations. Therefore, the classification established by Sarabia et al. (2012) was used as the basis for grouping the students' annotations. The framework has six basic content categories of the annotations: lexis, syntax, spelling, punctuation, discourse, and topic. Minor modifications were undertaken in the category to cover all the annotations made by the students in the current study. The results of the analysis of the learners' annotations for their content are presented in Table 1.

Table 1

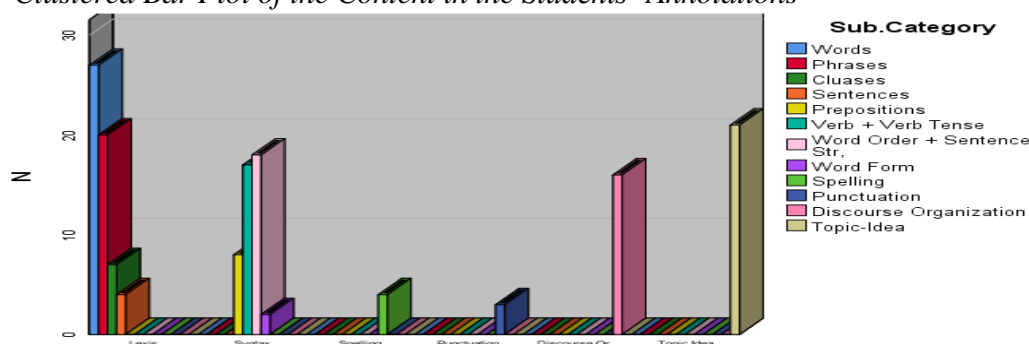
Frequency and Percentage of Content Categories in the Students' Annotations

Categories	Subcategories	Frequency	%	χ^2 (Sub)	χ^2 (Total)
1. Lexis	Words	27		$\chi^2 = 24.35$ df = 3 p ≤ 0.001	
	Phrases	20			
	Clauses	7			
	Sentences	4			
	SUBTOTAL	58	39.45		
2. Syntax	Preposition	8		$\chi^2 = 15.53$ df = 3 p ≤ 0.001	$\chi^2 = 735$ df = 55 p ≤ 0.001
	Verb + Verb Tense	17			
	Word Order + Sentence Structure	18			
	Articles	0			
	Word Form	2			
	SUBTOTAL	45	30.61		
3. Spelling		4	2.72	-	
4. Punctuation		3	2.04	-	
5. Discourse Organization		16	10.88	-	
6. Topic-Idea		21	14.28	-	
TOTAL		147	100		

As reported in Table 1, the two most frequent content categories in the students' annotations were lexis, followed by syntax. The results of the chi-square test ($\chi^2_{(55)} = 735, p \leq 0.001$) show that the difference in the content of the annotations used by students is significant. Moreover, within the first category - lexis, the most frequently used type was words, followed by syntax, which caused a significant difference in this category ($\chi^2_{(3)} = 24.35, p \leq 0.001$). Similarly, within the category of syntax - Word Order + Sentence Structure, followed by Verb + Verb Tense, were the most frequent types of annotation making a within-category significant difference ($\chi^2_{(3)} = 15.53, p \leq 0.001$). Figure 1 depicts the difference in the content of annotation using a clustered bar plot.

Figure 1

Clustered Bar Plot of the Content in the Students' Annotations



The description and percentage of use of the categories are presented hereunder.

1. Lexical annotations. This category includes the annotations which show the students' concerns at word level or beyond. This category contains the subcategories such as phrase, clause, and sentence level. For example, in this annotation "Can cacophonous be used for something as construction?", the student has asked about the appropriateness of the word. The result of the analysis showed that 39.45% of the total number of annotations was assigned to the lexical aspect of writing.

2. Syntactic annotations. This group contains the annotations in which the students express their uncertainties about the syntactic structures such as prepositions, verb or verb tense, word order or sentence structure, articles, and word

form. The analysis of the data revealed that 30.61% of the annotations fell into the category of syntactic annotations.

3. Spelling. This category deals with the annotations in which the students have asked about the correct spelling of particular words. For instance, in one of the annotations, the student asked: “should the internet have always capital ‘I’?”. The findings showed that only a small number of annotations (2.72%) fitted into this category.

4. Punctuation. The fourth category of annotations covers those denoting the learners’ problem or doubt regarding punctuation. As an illustration, one of the students asked: “Is a comma necessary here? ‘As time went by,...’”. The results reflected that only a few annotations (2.04%) belonged to this type.

5. Discourse organization. The annotations which indicate the learners’ problems in the discourse organization fall into this category. For instance, one of the students wrote “Is this transition used correctly, so the differences between classical and pop music are controversial?”. Based on the analysis of the data, 10.88% of the annotations fitted into this group.

6. Topic and idea. The last category of the annotations encompasses those in which the learners express their queries regarding the topic or idea which they try to convey. For example, “Are the points made in this essay well explained and supported?”. The results of the analysis indicated that 14.28% of the total number of annotations fell into this category.

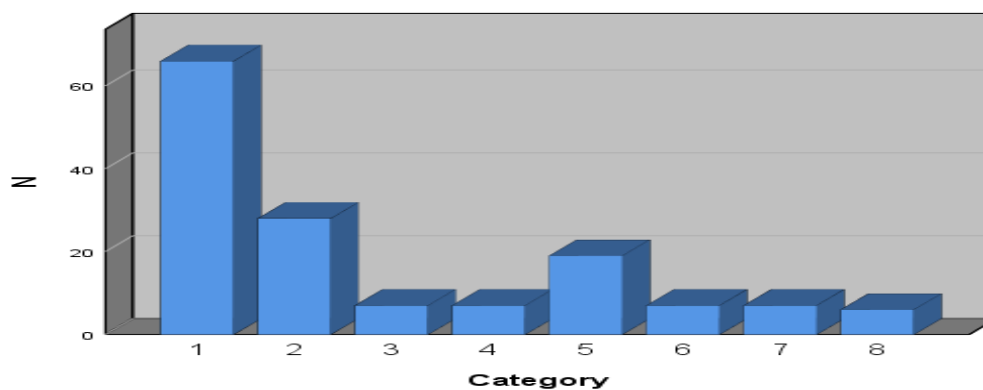
4.2. Forms of the EFL Learners’ Annotations

To accomplish the purpose of the current study, the annotations made by the students were examined and categorized in terms of their form, based on the framework established by Storch and Tapper (1996). This model of learner annotations has been extensively used in the extant studies (Bitchener & Storch, 2016; Estaji & Bikineh, 2022; Ruegg, 2020; Yaylı, 2012). However, the framework underwent some changes to best fit the data in this study. To this end, three distinct categories of “end-note”, “request for translation” and “expressing intention” were added to the basic framework. Analysis of the learners’ annotations form showed that they fell into eight main groupings, as presented in Table 2.

Table 2*Frequency and Percentage of the Students' Form of Annotations*

Form of students' annotations	Frequency	percentage	χ^2 (Total)
1. Is this correct or appropriate?	66	44.89	$\chi^2 = 165$ df = 7 p \leq 0.001
2. Which of the alternatives is correct?	28	19.04	
3. Blanket request	7	4.76	
4. Request for information	7	4.76	
5. Is there another way to say this?	19	12.92	
6. End-note	7	4.76	
7. Request for translation	7	4.76	
8. Expressing intention	6	4.08	
TOTAL	147	100	

As reported in Table 2 and depicted in Figure 2, the most frequent form of annotation used by students was type 1, followed by type 2. The results of the chi-square test ($\chi^2_{(7)} = 165$, $p \leq 0.001$) show that the difference in the frequency of use is significant. Figure 2 also depicts their difference of use in a bar plot.

Figure 2*Bar Plot of the Form in the Students' Annotations*

The features and percentage of use of the categories are reported in this section as follows:

1. Is this correct or appropriate?

In this form, the students have asked the teacher to check the correctness or appropriateness of a specific item. For example:

Student text

It must be noted that all these benefits are contingent upon the type of the cartoon.

Marginal note

Is the use of ‘contingent upon’ correct here?

The analysis of the data showed that 44.89% of the annotations belonged to the category of “Is this correct or appropriate?” As shown in Table 2, the largest number of annotations fell into this category.

2. Which of the alternatives is correct?

This form of annotations involves requesting the correction of two or more forms provided by the learners. The analysis of the data revealed that a large number of annotations (19.04%) belonged to this category. The following example shows the form of annotations in this group.

Student text

Moreover, researches have shown that babies born from smoker mothers are more likely to grow as smokers themselves.

Marginal note

“grow smokers” or “babies born from smoker mothers are grown as smokers”?

3. Blanket request

In the blanket request, the teacher is asked to check all the items in a sentence. In other words, such a request does not focus on a specific grammatical item (Storch & Tapper, 1996). The analysis of the data revealed that only 4.76% of the annotations were assigned to this group.

Students note:

Is this sentence correct? Last but not least reason of the Internet popularity is its entertaining feature.

4. Request for information

Another form of annotations represents the students’ inquiries about information on a specific item or a grammatical point.

Student note: Would it be correct to put a heading for each body paragraph?

As shown in Table 2, only 4.76% of the annotations made by the students were assigned to this form.

5. Is there another way to say this?

In some annotations, the students ask for a better or another way of saying something in their writing. The analysis indicated that 12.92% of the annotations were assigned to this form.

Student note: In order not to repeat the word “interpretation” in my essay, which word is better to use?

6. End-note

Only a few annotations (4.76%) were grouped into this category. This category covers the annotations which are usually written at the end of the essays, trying to inform the teacher about some general problems that the students have encountered during the essay writing process.

Student note: I do not know how to repeat the thesis statement in the conclusion.

7. Request for translation

A small number of annotations (4.76%) fell into this category. In this category, the students ask the teacher to give an English equivalent for a Persian word or expression.

Student note: There is the question of ----- (مقرون به صرفه بودن) in advertisements.

8. Expressing intention

The last category has to do with the annotations by which the students try to inform the teacher about their intention. The analysis of the data showed that the least number of annotations (4.08%) fell into this category.

Student text

Typhoon and hurricane are instances of noise which are born of nature.

Marginal note

I mean their sources are nature.

5. Discussion

In this section, the discussions point to some explanations for the results obtained in the study. As for the content of the annotations, which was the focus of the first research question of the current study, the result of the analysis of the learners' annotations revealed that they fell into six groups among which the category of lexis and syntax contained the largest number of annotations. The findings seem to be consistent with other studies in this area. For instance, in a study conducted by Cresswell (2000), the students tended to concentrate more on the local aspects of writing rather than other components such as appropriateness and relevance. Similarly, Sarabia et al. (2012) found that the most frequent annotations were those provided on lexis and syntax. Likewise, Storch and Tapper (1996) considered syntax and lexis to be the most frequently used annotations. Hereupon, the results of the study can support the ideas of Amrhein and Nassaji (2010) who suggested that "students are anxious to perfect their English, and that rather than focusing on conveying interesting and coherent ideas, they consider error-free writing to be their goal" (Amrhein & Nassaji, 2010, p. 115).

However, the number of annotations on the discourse organization, topic, and idea was higher when compared with other similar studies (Sarabia et al., 2012; Storch & Tapper, 1996). This might be attributed to the differences which exist among the learners in terms of the level of proficiency in this study and the studies conducted by Storch and Tapper (1996), Sarabia et al. (2012), Chen (2009), and Yu and Liu (2021). In this study, the participants were university students at the intermediate level of proficiency. According to Cumming (1989), second-language proficiency proved to enhance the overall quality of writing performance and enabled the learners to pay attention to different aspects of their writing.

Moreover, the course of essay writing provided the opportunity for the learners to become familiar with different organizations of the essay, the features of a cohesive and coherent discourse, and the ways they can develop their ideas throughout the text. Hence, the findings are in tune with the result of the study

conducted by Xiang (2004), in which most of the learners stated that the self-monitoring technique was most helpful to them with the organization of their compositions. In the same way, Cheong (1994) found that the students with a relatively higher proficiency tended to be more concerned with matters beyond the sentence level and stated that “the students’ proficiency may somehow be related to their foci of concern and that the more proficient one is the more likely to look at matters beyond sentence level” (p. 70).

Concerning the form of the annotations used by the learners in the current study, the analysis of the data showed that the categories of “is this correct or appropriate?” and “which alternative is correct?” were the most frequently used annotations. This finding accords with what was found in the earlier study conducted by Storch and Tapper (1996), who maintained that the self-monitoring technique provided the opportunity for the learners to consider the points about which they are not fully confident, and for the teachers to provide positive as well as negative feedback on the learners’ writings. On the contrary, in the study carried out by Sarabia et al. (2012), a large number of annotations were assigned to the category of “request for translation”. The less frequent use of “request for translation” in this study was not consistent with what Sarabia et al. (2012), claimed as to the importance of using L1 in L2 writing.

Undoubtedly, L1 is considered an important tool in L2 writing, and it is used with various purposes, such as planning and organizing the text, generating ideas, recalling the appropriate vocabulary, as well as reviewing the text (Murphy & Roca de Larios, 2010; Sarabia et al., 2012; Wang, 2003). Such a contrast can be attributed to the difference between the learners’ level of proficiency in the two studies. Since the participants in this study were at the intermediate level, they were able to express their doubts and uncertainties in L2 without resorting to their L1. However, in Sarabia et al.’s (2012) study, it was difficult for the low proficient learners to identify and express their difficulty without having recourses to L1.

The analysis of the annotations also revealed that the category of “blanket request” was one of the low frequent forms, in contrast with what was found by Storch and Tapper (1996). This inconsistency may be related to the learners’ level of proficiency too. While the learners who were at the lower level of language knowledge could not identify and locate their problems exactly, more proficient learners were able to express the exact area of their difficulty. As Charles (1990)

also maintained, the self-monitoring technique might be more beneficial for advanced and intermediate learners.

Hereupon, Radecki and Swales (1988) found the learners of low proficiency level rather unwilling to correct their errors as they were unable to detect and rectify their errors and hence expected their teachers to do so. Therefore, the learners at the lower level of proficiency are more dependent on the blanket request, for they are not able to spot the specific problems they have in their writing. In contrast, the learners at higher levels of proficiency can identify the problematic areas precisely; therefore, they require using the blanket request less frequently. The use of this technique was also considered a prominent challenge for the students at low levels of proficiency (Weerathai, 2019).

Another category of annotations, which contains rather a large number of annotations, was the category of “is there another way to say this?”. The result of the study was not consistent with that of Sarabia et al. (2012), as in the current study the number of annotations that fell under this category was very low. Such a difference might be attributed to the learners’ proficiency level. Since the learners in this study possess a higher level of language proficiency, they can devote their particular attention to the higher-level aspects of writing in terms of novelty, pertinence, and intelligibility.

All in all, from the qualitative analysis of the learners’ annotations, it can be claimed that the learners’ level of proficiency plays a central part in how well the students employ the self-monitoring technique in their own writing, influencing the way they make use of the annotation technique in terms of its form and content as it has also been pointed out in the previous studies.

6. Conclusion and Implications

Following the purpose of the current study, the annotations made by the participants of the study during the course of essay writing were examined in terms of their form and content based on the frameworks proposed by Sarabia et al. (2012) and Storch and Tapper (1996) respectively. The results of frequency count and percentage revealed that the learners’ annotations mostly focus on the lexical and syntactic aspects of writing, and to a lesser extent on the discourse organization. Likewise, the largest number of annotations was assigned to the two categories of “is it correct or appropriate?” and “which of the alternatives is correct?”. However, the category

of “request for translation” presented the least number of annotations.

Hence, it is worthwhile to utilize and focus on the self-monitoring technique in writing courses as it brings a wealth of information regarding the writing content and problematic areas for both the teacher and learners. Likewise, it assists learners in reflecting, monitoring, evaluating as critical features of writing performance (Qin & Zhang, 2019), and detecting their strengths and problematic areas, and through the teacher feedback, they seek to find an appropriate solution. By using the self-monitoring technique, the teacher and students can have discussions over the written text, making the process of writing interactive. More importantly, teachers are informed about the multiple aspects of writing which cause difficulty for the learners; therefore, they can highly focus on those areas in the class. In other words, when the teachers concentrate on the learners’ annotations, they know how to modify and adjust their instruction to cover the learners’ needs properly. However, full training is required for the students to fully understand the self-monitoring technique and employ it efficiently in their own writing. According to Gickling and Armstrong (1978), Steiner et al. (2020), Hallahan and Sapona (1983), and the findings of the current study, students do not find the self-monitoring procedures fruitful unless they have the skills to accomplish the monitored tasks.

As limitations encountered in this study, several areas need to be noted. The participants of the study were undergraduate university students at the intermediate level; therefore, the results of the study could not be generalized to other levels of education. Moreover, considering the form and content of learner annotations, similar findings might not be obtained in case learners are provided with different writing topics and tasks and teacher response and feedback. Future studies are required to explore the cross-national differences in terms of the types of annotations made by the learners. For instance, these studies can focus on the differences between native and non-native learners in terms of the types of annotations they make in their writing. In future investigations, it is also possible to examine the degree to which the trained students are motivated to get willingly involved in the process of self-monitoring while receiving teacher-initiated feedback.

References

- Amrhein, H. R., & Nassaji, H. (2010). Written corrective feedback: What do students and teachers prefer and why? *Canadian Journal of Applied Linguistics*, 13(2), 95–127.
- Arndt, V. (1993). Response to writing: Using feedback to inform the writing process. In M. Brook & L. Walters (Eds.), *Teaching composition around the Pacific rim: Politics and pedagogy* (pp. 90–116). Multilingual Matters.
- Arslantas, S., & Kurnaz, A. (2017). The effect of using self-monitoring strategies in social studies course on self-monitoring, self-regulation and academic achievement. *International Journal of Research in Education and Science*, 3(2), 452–463. <https://doi.org/10.21890/ijres.327905>
- Bellhauser, H., Losch, T., Winter, C., & Schmitz, B. (2016). Applying a web-based training to foster self-regulated learning: Effects of an intervention for large numbers of participants. *Internet and Higher Education*, 31, 87–100. <https://doi.org/10.1016/j.iheduc.2016.07.002>
- Bitchener, J., & Storch, N. (2016). Written corrective feedback for L2 development. Multilingual Matters.
- Brown, H. D. (2001). *Teaching by principles: An interactive approach to language pedagogy*. Prentice-Hall Regents.
- Carless, D. (2006). Differing perceptions in the feedback process. *Studies in Higher Education*, 31(2), 219–233. <https://doi.org/10.1080/03075070600572132>
- Carless, D., & Chan, K. K. H. (2016). Managing dialogic use of exemplars. *Assessment & Evaluation in Higher Education*, 42(6), 930–941. <https://doi.org/10.1080/02602938.2016.1211246>
- Carless, D., Chan, K. K. H., To, J., Lo, M., & Barrett, E. (2018). Developing students' capacities for evaluative judgment through analyzing exemplars. In D. Boud, R. Ajjawi, P. Dawson & J. Tai (Eds.), *Developing evaluative judgement in Higher Education* (pp.108–116). Routledge.
- Charles, M. (1990). Responding to problems in written English using a student self-monitoring technique. *ELT Journal*, 44(4), 286–293. <https://doi.org/10.1093/elt/44.4.286>

- Chen, X. (2009). Self-monitoring feedback in English writing teaching. *Research in Theoretical Linguistics*, 3(12), 109–117.
- Cheong, L. K. (1994). Using annotation in a process approach to writing in a Hong Kong classroom. *TESL Reporter*, 27(2), 63–73.
- Cresswell, A. (2000). Self-monitoring in student writing: Developing learner responsibility. *ELT Journal*, 54(3), 235–244.
<https://doi.org/10.1093/elt/54.3.235>
- Cumming, A. (1989). Writing expertise and second-language proficiency. *Language Learning*, 39(1), 81–135. <https://doi.org/10.1111/j.1467-1770.1989.tb00592.x>
- Derakhshan, A., & Karimain Shirejini, R. (2020). An investigation of the Iranian EFL learners' perceptions towards the most common writing problems. *Sage Open*, 10(2), 1–10. <https://journals.sagepub.com/doi/full/10.1177/2158244020919523>
- Dixon, H., Hawe, E., & Hamilton, R. (2020). The case for using exemplars to develop academic self-efficacy. *Assessment & Evaluation in Higher Education*, 45(3), 460–471. <https://doi.org/10.1080/02602983.2019.1666084>
- Dougherty, V. (2018). *The effectiveness of student choice of self-monitoring* (Master's thesis). Retrieved from <http://dw.rowan.edu/etd/2564>.
- El Tatawy, M. (2006). Corrective feedback in second language acquisition. *Columbia University Working Papers in TESOL & Applied Linguistics*, 2(2), 1–19.
- Eslami, Z. R., & Derakhshan, A. (2020). Promoting advantageous ways of corrective feedback in EFL/ESL classroom. *Language Teaching Research Quarterly*, 19, 48–65. <https://doi.org/10.32038/ltrq.2020.19.04>
- Estaji, M., Bikineh, L. (2022) Self-monitoring and teacher's response as a pedagogical technique to promote EFL learners' perceptions and writing performance. *MEXTESOL Journal*, 46(1), 1-19.
- Fathi, J., Derakhshan, A., & Safdari, M. (2020). The impact of portfolio-based writing instruction on writing performance and anxiety of EFL students. *Polish Psychological Bulletin*, 51(3), 226–235.
- Fathi J., Saharkhiz Arabani, A., & Mohamadi P. (2021). The effect of

- collaborative writing using Google Docs on EFL learners' writing performance and writing self-regulation. *Language Related Research*, 12 (5), 333-359. <https://doi.org/10.29252/LRR.12.5.12>
- Ferris, D. R. (2012). Written corrective feedback in second language acquisition and writing studies. *Language Teaching*, 45(4), 446-459. <https://doi.org/10.1017/s0261444812000250>
- Flower, L. S., & Hayes, J. R. (1980). The dynamics of composing: Making plans and juggling constraints. In L. W. Gregg & E. R. Steinberg (Eds.), *Cognitive processes in writing* (pp. 31-50). Lawrence Erlbaum Associates.
- Gickling, E. E., & Armstrong, D. L. (1978). Levels of instructional difficulty as related to on-task behavior, task completion, and comprehension. *Journal of Learning Disabilities*, 11(9), 559-566. <https://doi.org/10.1177/002221947801100905>
- Graham, S., & Harris, K. R. (2005). *Writing better: Effective strategies for teaching students with learning difficulties*. Paul H. Brookes.
- Guo, L. (2022). The effects of self-monitoring on strategy use and academic performance: A meta-analysis. *International Journal of Educational Research*, 112(1), 101939. <https://doi.org/10.1016/j.ijer.2022.101939>
- Hallahan, D. P., & Sapona, R. (1983). Self-monitoring of attention with learning-disabled children past research and current issues. *Journal of Learning Disabilities*, 16(10), 616-620. <https://doi.org/10.1177/002221948301601011>
- Hawe, E., & Dixon, H. (2017). Assessment for learning: A catalyst for student self-regulation. *Assessment & Evaluation in Higher Education*, 42(8), 1181-1192. <https://doi.org/10.1080/02602938.2016.1236360>
- Hawe, E., Dixon, H., & Hamilton, R. (2021). Why and how educators use exemplars. *Journal of University Teaching & Learning Practice*, 18(3), 1-13.
- Hawe, E., Lightfoot, U., & Dixon, H. (2019). First-year students working with exemplars: promoting self-efficacy, self-monitoring, and self-regulation. *Journal of Further and Higher Education*, 43(1), 30-44. <https://doi.org/10.1080/0309877X.2017.1349894>
- Hughes, M. D., Regan, K. S., & Evmenova, A. (2019). A computer-based graphic

organizer with embedded self-regulated learning strategies to support student writing. *Intervention in School and Clinic*, 55, 13–22.

<https://doi.org/10.1177/1053451219833026>

Hyland, K. (2003). *Second language writing*. Cambridge University Press.

Hyland, K., & Hyland, F. (2019). *Feedback in second language writing: Contexts and issues*. Cambridge University Press.

Kauffman, D. F., Zhao, R., & Yang, Y. S. (2011). Effects of online note taking formats and self-monitoring prompts on learning from online text: Using technology to enhance self-regulated learning. *Contemporary Educational Psychology*, 36(4), 313–322.

<https://doi.org/10.1016/j.cedpsych.2011.04.001>

Kim, Y., & Emeliyanova, L. (2019). The effects of written corrective feedback on the accuracy of L2 writing: Comparing collaborative and individual revision behavior. *Language Teaching Research*, 25(2), 234–255.

<https://doi.org/10.1177/1362168819831406>

Lan, W. Y. (1996). The effects of self-monitoring on students' course performance, use of learning strategies, attitude, self-judgment ability, and knowledge representation. *Journal of Experimental Education*, 64(2), 101–115.

<https://doi.org/10.1080/00220973.1996.9943798>

Ma, M., & Teng, F. (2021). Metacognitive knowledge development of students with differing levels of writing proficiency in a process-oriented course: An action research study. In B. L. Reynolds, & M. F. Teng (Eds.), *Innovative approaches in Teaching writing to Chinese speakers* (pp. 92–117). DeGruyter Mouton.

Makovskaya, L., & Radjabzade, S. (2022). Source use by EFL undergraduate students: Challenges and success in process-based writing. *Language Related Research*, 13(3), 255–284. <https://doi.org/10.29252/LRR.13.3.10>

Murphy, L., & Roca de Larios, J. (2010). Searching for words: One strategic use of the mother tongue by advanced Spanish EFL writers. *Journal of Second Language Writing*, 19(2), 61–81. <https://doi.org/10.1016/j.jslw.2010.02.001>

Nassaji, H., & Kartchava, E. (2020). Corrective feedback and good language

- teachers. In C. Griffiths, & Z. Tajeddin (Eds.), *Lessons from good language teachers* (pp. 151–163). Cambridge University Press.
- Nückles, M., Hübner, S., & Renkl, A. (2009). Enhancing self-regulated learning by writing learning protocols. *Learning and Instruction, 19*(3), 259–271.
<https://doi.org/10.1016/j.learninstruc.2008.05.002>
- Phakiti, A., & Isaacs, T. (2021). Classroom assessment and validity: Psychometric and edumetric approaches. *European Journal of Applied Linguistics and TEFL, 10*(1), 3–24. <https://discovery.ucl.ac.uk/id/eprint/10118328>
- Purnawarman, P. (2011). *Impacts of different types of teacher corrective feedback in reducing grammatical errors on ESL/EFL students' writing* (Unpublished doctoral dissertation). Virginia Polytechnic Institute and State University, USA. Retrieved from <http://scholar.lib.vt.edu/thesis.html>.
- Qin, L., & Zhang, L. J. (2019). English as a foreign language writers' metacognitive strategy knowledge of writing and their writing performance in multimedia environments. *Journal of Writing Research, 11*(2), 393–413.
<https://doi.org/10.17239/jowr-2019.11.02.06>
- Radecki, P. M., & Swales, J. M. (1988). ESL student reaction to written comments on their written work. *System, 16*(3), 355–365.
[https://doi.org/10.1016/0346-251x\(88\)90078-4](https://doi.org/10.1016/0346-251x(88)90078-4)
- Rafferty, L. A. (2010). Step-by-step: Teaching students to self-monitor. *Teaching Exceptional Children, 43*(2), 50–58.
<https://doi.org/10.1177/004005991004300205>
- Rock, M. L., & Thead, B. K. (2007). The effects of fading a strategic self-monitoring intervention on students' academic engagement, accuracy, and productivity. *Journal of Behavioral Education, 16*(4), 389–412.
<https://doi.org/10.1007/s10864-007-9049-7>
- Ruegg, R. (2020). Student-led feedback on writing: Requests made and feedback received. *Journal of Response to Writing, 6*(2), 69–101.
- Sarabia, R., Nicolás, F., & Larioss, J. (2012). Self-Monitoring in L2 writing by Spanish secondary school students. *Porta Linguarum, 18*, 7–25.
<https://doi.org/10.30827/digibug.30917>

- Saunders, J. (2020). *Let's talk: A study of dialogic feedback in a first-year composition classroom* [Unpublished Master's thesis], St. Cloud State University. https://repository.stcloudstate.edu/engl_etds/158
- Seker, M., & Dincer, A. (2014). An insight to students' perceptions on teacher feedback in second language writing classes. *English Language Teaching*, 7(2), 73–83. <https://doi.org/10.5539/elt.v7n2p73>
- Sommers, N. (1982). Responding to student writing. *College Composition and Communication*, 33(2), 148–156.
- Steiner, M., van Loon, M. H., Bayard, N. S., & Roebbers, C. M. (2020). Development of children's monitoring and control when learning from texts: Effects of age and test format. *Metacognition and Learning*, 15(1), 3–27. <https://doi.org/10.1007/s11409-019-09218-3>.
- Storch, N. (2010). Critical feedback on written corrective feedback research. *International Journal of English Studies*, 10(2), 29–46. <https://doi.org/10.6018/ijes/2010/2/119181>
- Storch, N., & Tapper, J. (1996). Patterns of NNS student annotations when identifying areas of concern in their writing. *System*, 24(3), 323–336. [https://doi.org/10.1016/0346-251x\(96\)00025-5](https://doi.org/10.1016/0346-251x(96)00025-5)
- Storch, N., & Tapper, J. (1997). Student annotations: What NNS and NS university students say about their own writing. *Journal of Second Language Writing*, 6(3), 245–264. [https://doi.org/10.1016/s1060-3743\(97\)90014-x](https://doi.org/10.1016/s1060-3743(97)90014-x)
- Teng, F. (2020). Tertiary-level students' English writing performance and metacognitive awareness: A group metacognitive support perspective. *Scandinavian Journal of Educational Research*, 64(4), 551–568. <https://doi.org/10.1080/00313831.2019.1595712>
- Wang, L. (2003). Switching to first language among writers with differing second-language proficiency. *Journal of Second Language Writing*, 12(4), 347–375. <https://doi.org/10.1016/j.jslw.2003.08.003>
- Weerathai, T. (2019, 22-24 June). *Self-monitoring and peer feedback strategies: Challenges and opportunities in the EFL writing class*. Paper presented at the International Conference on Education and New Developments, Porto, Portugal. Retrieved from <http://end-educationconference.org/wp->

content/uploads/2019/06/Education-and-New_Developments_2019_Vol_II.pdf

Weigle, S. C. (2005). Second language writing expertise. In K. Johnson (Ed.), *Expertise in second language learning and teaching* (pp. 128–149). Palgrave Macmillan.

Xiang, W. (2004). Encouraging self-monitoring in writing by Chinese students. *ELT Journal*, 58(3), 238–246. <https://doi.org/10.1093/elt/58.3.238>

Yaylı, D. (2012). Tracing the benefits of self-annotation in genre-based writing. *The Journal of Language Teaching and Learning*, 2(1), 45–58.

Yu, S., & Liu, C. (2021). Improving student feedback literacy in academic writing: An evidence-based framework. *Assessing Writing*, 48(1), 1–12.

Zhang, L. J. (2018). Appraising the role of written corrective feedback in EFL writing. In Y.-N. Leung, J. Katchen, S.-Y. Hwang, & Y. Chen (Eds.), *Reconceptualizing English Language Teaching and Learning in the 21st Century* (pp. 134–146). Crane.

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