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Improving Turkish EFL Learners' Writing Accuracy: Effects of Written Languaging and Languaging Type

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Abstract

"Languaging" is "the use of language to mediate cognitively demanding/complex activities" (Swain, 2010, p.565). Many research studies have been conducted on the effects of languaging on language learning since its introduction to the literature by Swain. This study, which is a replication of Suzuki's (2012), also aims at finding the extent of Turkish EFL learners' engagement in written languaging and the effects of it on improvement in accuracy. The participants (17) wrote paragraphs and received direct feedback. Then, they engaged in languaging and immediate revisions. The results demonstrated that participants mostly focused on grammar-based languaging and improved their writing accuracy significantly.

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1. Introduction

The Noticing Hypothesis states that input cannot become intake unless it is noticed (Schmidt, 1990). Also, Swain has identified different functions of output in her Output Hypothesis (1985). She says that output increases one's fluency or automatization of language use. Besides, forming and testing the hypotheses learners produce about the target language and getting feedback support learners' acquisition of the target language. Also, metalinguistic function

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makes learners engage in conscious reflection on their language use and makes learners become more aware of form–meaning–function relationships. When L2 learners are involved in output activities, they become aware of their linguistic problems (Hanaoka, 2007).

The term languaging which has a lot in common with the Noticing Hypothesis and Swain's Output Hypothesis was introduced by Swain to L1 and L2 teaching. She defines languaging as ''a dynamic, never-ending process of using language to make meaning" (Swain, 2006, p. 96). It is a means that can be used for learning a language and "the process of making meaning and shaping knowledge and experience through language" (Swain, 2006, p.98).

In his study Suzuki (2012) states that from a cognitive psychology perspective, written languaging can work as "memory encoding" and "external memory". During a problem solving activity, students produce explanations about the materials used. They encode them in their memory using their own words. Also, they make inferences about them and try to restore previous misunderstandings about the materials. Thus, written languaging can help learners for memory encoding which makes their next performance get better. Besides, it can be used as external memory. "When engaged in written languaging, students can reflect on the product of written languaging as external memory" (pg.1113). As an external memory device, it helps them understand instructional materials and clarify their understanding about them. Furthermore, from a sociocultural psychology perspective "written languaging can be considered as written externalization of one's inner dialogue with the self" and it is "a transitional form between external and internal speech" (p.1113).

In literature there is a limited number of studies on written languaging. In his study, Hanaoka (2007) investigated what Japanese EFL learners spontaneously noticed in a picture-description task. In the study, participants wrote a story based on a picture prompt, were given model paragraphs prepared by two native speakers, and revised their original writings. During the revisions, they took notes related to the problems they had during composing and the problems they noticed. According to the results, participants noticed their linguistic problems (mostly lexical) and solutions when they made comparisons and incorporated more than 90% of them in their immediate revisions.

Suzuki and Itagaki (2009) examined the potential interactions among the type of languaging, the type of discrete grammar exercises, and learners' level of L2 proficiency. The participants were involved in languaging while they were writing about how they solved one of two grammar exercises (comprehension-oriented and production-oriented). The results of the study demonstrated that the participants engaged in grammar languaging the most and not only the type of tasks but also the level of L2 proficiency determines of the type of languaging.

Moreover, Ishikawa (2013) explored the role of written languaging through note taking. He investigated whether written languaging supported language learning. Participants took metanotes while they were doing a translation task. Then, the effects of metanotes were analyzed. The results indicated that metanotes had a positive impact on L2 learning.

The study which was replicated by this study was conducted by Suzuki (2012). He investigated the effects of written languaging on L2 writing revision. The participants wrote essays in response to a prompt. Then, these essays were corrected by a native speaker. The participants engaged in written languaging, and they revised their essays without seeing the corrections made by the native speaker. The results showed that written languaging about direct feedback on linguistic errors contributed to immediate revision and improved accuracy.

Although the studies mentioned above produced fruitful results and showed that written languaging contributed to second language acquisition, the number of the studies conducted on the topic is very small. As the replication of the study conducted by Suzuki (2012), this study explored the effects of written languaging on L2 learning. Also, whether there was a difference in the effect of the type of languaging on accuracy of immediate revision was investigated. Research questions asked in this study were the same as the ones in Suzuki's (2012) study:

1. To what extent do participants engage in languaging, measured as the number and type of written language episodes (WLEs), in response to direct correction of a paragraph?
2. Do the WLEs that participants produce mediate improvement in accuracy, as measured by successful immediate revision?
3. Does the type of WLE (i.e., grammar versus lexis WLEs) have a differential effect on immediate revision?

2. Method

2.1. Setting and participants

The participants were 17 EFL learners (six males and 11 females) studying at Gazi University School of Foreign Languages and all of them were native speakers of Turkish. Their ages ranged from 17 to 19 years (M = 18.11; SD = 0.69). All of them stated that they had been learning English for more than ten years. They were elementary level students and had been students at Gazi University for three months.

An instructor of English participated in the study too. She had four years' experience in English language teaching and was a PhD student in the Department of English Language Teaching. She coded 50% of all the data (110 out of 219 WLEs) for inter-rater agreement. Although in Suzuki's study a native speaker of English provided feedback on the students' writing, in this study the researcher who had 11 years' experience in English language teaching made the corrections on the students' writing.

2.2. Procedure

The study lasted for two weeks and took place during regular classroom instruction in general English course at the university. The procedure of the study can be seen on Table 1.

Table 1. *The Procedure of the Study*

Week 1	Week 2
First paragraphs (50 min)	1. Languaging (30 min)
	2. Demographic data questionnaire (5 min)
	3. Immediate Revision (25 min)

Although in Suzuki's study, the participants wrote essays, in this study the participants wrote paragraphs because of their level of English. They wrote them in the first week on a written prompt. 50 minutes were given to the participants to complete their paragraphs. Then, they were collected and corrected directly by the researcher. In the second week, the students had the copies of their paragraphs with corrections, and they performed a written languaging task in Turkish. They tried to make explanations related to the corrections made on their paragraphs. After the written languaging sheets were collected, they had the demographic data questionnaire. After that, they had a copy of their original paragraphs (not corrected) and were asked to revise it on a separate sheet of paper in 25 minutes. During the first writing session and the revision session, the students were not allowed to use dictionaries and studied on their own without the instructor' support.

2.3. Direct Correction

The researcher corrected all linguistic errors and provided the correct linguistic forms on the sheets. She also deleted unnecessary words, phrases or morphemes and added missing ones.

2.4. Materials

In the study a writing prompt, a languaging prompt and a demographic data questionnaire were used. The writing prompt was as the following: "write about the best or the worst day of your life. When was it? Where were you? Who were you with? What happened? How did you feel?" The prompt was chosen taking the learners' limited knowledge of English grammar into consideration. The students used their native language for the languaging task because it was not possible for them to do it in English because of their level of English. They answered the following questions for the task: "Why is the form incorrect? Why was it corrected? Explain the reasons for the correction in Turkish". If the

participants did not have an idea about the reason of the correction, they were allowed to write "I do not know". As for the questionnaire, it was applied to gather information about the participants' age, gender and language learning experiences.

2.5. Coding and Analysis

For coding the data, firstly the number of words, sentences, errors for each composition and the average means for each participant were calculated. Also, successful and unsuccessful incorporations of written language episodes in the revised paragraph were coded.

Categorization and analysis of the languaging data were the same the ones in Suzuki's study. The participants' explanations about the direct correction for errors were named and coded as a written language episode (WLE). It is similar to a language-related episode (LRE) (see Swain & Lapkin, 1998). The participants produced 219 WLEs and they were categorized as "lexis", "grammar" and "don't know" WLEs. WLEs which did not belong to these three categories were coded as "other" WLEs, but they were excluded as in Suzuki's study because there were only three WLEs in this category.

Lexis WLEs included the ones related to word choice, word meanings and spelling. Grammar WLEs contained the WLEs about the English grammar, namely, tense, grammatical morphology, word order and articles. When the participants were not sure about the reason for the correction, they used "I don't know" WLEs. 33 don't know WLEs were found in the study. Examples of these three types of WLEs are given below. Because the participants produced the WLEs in Turkish, they were translated into English.

Example 1: Lexis WLE

The first paragraph with direct correction: We decorated the house and it was fun.
Written languaging episode: I used the word "funny" instead of "fun". I used the wrong word. They have different meanings.
Revised paragraph: We decorated the house and it was fun.

Student 15 wrote "We decorated the house and it was funny" for the first paragraph and the word "funny" was corrected as "fun". She wrote "I used the word "funny" instead of "fun". I used the wrong word. They have different meanings" to explain the reason for the correction. She corrected her error and wrote "We decorated the house and it was fun" for the revised paragraph.

Example 2: Grammar WLE

The first paragraph with direct correction: We prepared some meatballs until the concert began.
Written languaging episode: I used the verb in the wrong place. I should have been careful about the word order.
Revised paragraph: We prepared some meatballs until the concert began.

Example 2 shows an example of grammar WLE. Student 1 wrote "We prepared some meatballs until the began concert". She received a correction on word order and explained "I should have been careful about the word order" in languaging. For the revised paragraph, she wrote "We prepared some meatballs until the concert began".

Example 3: Don't know WLE

The first paragraph with direct correction: I was shocked because my father's arm and leg were broken.
Written languaging episode: I wrote "I was shock" and it was corrected, but I don't know the reason for the correction.
Revised paragraph: I was shock because my father's arm and leg were broken.

As can be seen in the example above, student 5 wrote “I was shock because my father’s arm and leg were broken” and “was shock” was corrected as “was shocked”. However, the student wrote that she did not know the reason for the correction and made the same error while writing the revision.

As mentioned before, an instructor coded 50% of the WLE data (110 out of 219) to check inter-rater agreement. The researcher and the instructor agreed on 94.5% of the classifications of the types of WLEs. By making discussions on the disagreements, they reached agreements. Also, for intra-rater reliability, the researcher recoded the data two weeks later and the intra-rater agreement was 98.6%.

3. Findings

3.1. Occurrence and Types of WLEs during Languaging

To answer the first research question asking about the amounts and types of WLEs produced by the participants after they had the corrections made by the instructor on their first paragraph, the overall occurrence of WLEs was examined. Also, the relative frequency of lexis WLEs, grammar WLEs, and don’t know WLEs was sought. The results can be seen in Table 2. Because the instructor made direct corrections on an average of 15.76 errors per paragraph in the first paragraphs, the number of WLEs produced on average by each participant shows that they involved in languaging a lot (12.8 WLEs on average per individual)

Table 2. *Frequency and Percentage of Types of Written Language Episodes*

	N	%	Average (SD)	Maximum	Minimum
Grammar	148	67.5	8.70 (3.19)	15	4
Lexis	38	17.3	2.23 (1.98)	6	0
Don’t know	33	15	1.94 (1.74)	6	0
Total	219	100	12.8 (4.51)	21	5

Note. SD= standard deviation

Furthermore, to find the extent to which participants produced lexis WLEs, grammar WLEs, or don’t know WLEs more often when they involved in languaging, a one-sample chi square test was done and the results showed a significant difference, $\chi 2(2, N = 219) = 117.75$, $p < .00$ with a large effect size Φ.52. Then, to see where the differences were pairwise comparisons were made. Table 3 shows the results.

Table 3. *The Pairwise Comparisons of Written Language Episodes (WLE)*

Comparison	*Pearson chi-square*	*p* value (Alpha)	Effect Size (Φ)
Grammar vs. Don’t know WLEs	80.99	.000	60
Lexis vs. Grammar WLEs	95.84	.000	66
Lexis vs. Don’t know WLEs	8.15	.004	19

As can be seen in Table 3 three pairwise differences were significant: (a) between grammar WLEs and don’t know WLEs, with a large effect size (Φ= .60); (b) between grammar WLEs and lexis WLEs, with a large effect size (Φ= .66); and (c) between lexis WLEs and don’t know WLEs, with a small effect size (Φ= .19). As a result, participants engaged in grammar-based languaging more often about the corrections made.

3.2. *Relationship between Written Language Episodes and Revisions*

The second research question asked whether engaging in written languaging had a positive impact on revision. To answer this question, the average number of words, sentences, and errors produced by each participant in the first paragraph and the revised paragraph was calculated. Table 4 shows the average numbers.

Table 4. *Average Number (and Standard Deviation) of Words, Sentences, and Errors*

	First Paragraph	Revised Paragraph
Words	163.05 (49.26)	169.47 (51.68)
Sentences	20.58 (6.67)	21.47 (7.51)
Errors	17.64 (8.58)	1.82 (2.27)

Besides, average number of normalized error counts in the first and revised paragraphs are shown in Table 5.

Table 5. *Average Number (and Standard Deviation) of Normalized Error Counts*

	First Paragraph	Revised Paragraph
Errors	18.02 (7.11)	1.66 (1.78)

In order to see whether the participants produced fewer errors for the revised paragraph than the first paragraph, a Wilcoxon Signed Rank Test was conducted (instead of a paired sample t-test because there was not a normal distribution). It revealed a statistically significant reduction in the number or errors, z=-3.62, p<001, with a large effect size (r=.87). The median score decreased from the first paragraph (Md=16.42) to the revised paragraph (Md=.95). The results clearly showed that the participants produced far fewer errors for the revised paragraph than for the first paragraph.

Table 6. *Frequency and Percentage of Types of Written Language Episodes in Revisions*

	N	%	Average (SD)	Maximum	Minimum
Successful incorporation	190	87	11.17 (4.08)	20	4
Unsuccessful incorporation	29	13	1.70 (2.08)	8	0

Note. SD= standard deviation

To answer Research Question 2, frequencies and percentages of the occurrence of successful and unsuccessful revisions were found out too. Table 6 demonstrates the results of these analyses.

3.3. Type of Written Language Episodes and Type of Revision

Research Question 3 asked whether the type of WLE had a differential effect on immediate revision. In order to answer this question, the frequencies and percentages of the learners' incorporation of each of the three WLE types were calculated and compared. The results are presented in Table 7.

Table 7. *Frequency of Successful and Unsuccessful Incorporation of Written Language Episodes*

	Successful incorporation		Unsuccessful incorporation	
	N	%	*N*	%
Grammar	136	93	11	7
Lexis	34	92	3	8
Don't know	20	57	15	43
Total	190	87	29	13

As the table demonstrates, although the percentages of successful grammar and lexis WLE incorporation were high, the participants had difficulties in incorporating don't know WLEs into their revised paragraphs. Only 57% of the errors could be corrected. Thus, it can be concluded that when the learners understood the source of the error, they were more successful in incorporation.

4. Discussion and Conclusion

4.1. Type of Written Languaging

The first research question was: To what extent do participants engage in languaging, measured as the number and type of written language episodes (WLEs), in response to direct correction of a paragraph? The results showed that 67.5% of the WLEs produced by the participants were grammar-based. Thus, they mainly focused on this type of WLEs. The percentages of lexis-based WLEs (17.3%) and don't know WLEs (15%) were close to each other.
The results were in line with the ones in Suzuki's study (2012). In his study, the participants focused on grammar-based WLEs (61%) too. Also, the results related to the first research question were similar to the ones in Suzuki and Itagaki's (2009) study which found that a Japanese-to-English translation task produced the most grammatical episodes. Besides, in another study they conducted (2009), both low-intermediate and high-intermediate proficiency groups engaged in more grammar-oriented languaging.

However, in Hanaoka's study (2007) the participants produced mostly lexis-based LREs while they were comparing their writing with the ones produced by the native speakers. Similarly, the results obtained from Ishikawa (2013) showed that the participants mostly produced lexical notes. In addition, in Qi and Lapkin's study, one of the participants who was a low achiever focused on lexis much more than grammar.

In their study Suzuki and Itagaki (2009) concluded that students' proficiency level was related to the type of languaging. Lower proficiency L2 learners paid more attention to forms than higher proficiency L2 learners. Nevertheless, although the participants in this study were elementary level students, they created far more grammar WLEs than lexis WLEs and don't know WLEs. These results may be an indication of the participants' language learning habits and the importance of the contextual differences in language teaching. Because the participants come from a grammar-based language learning tradition, they gave much more importance to grammatical errors and tried to make explanations for them. Therefore, they produced grammar-based WLEs the most.

4.2. Written Languaging and Immediate Revision

Research Question 2 was: Do the WLEs that participants produce mediate improvement in accuracy, as measured by successful immediate revision? According to the results, the participants could incorporate 87% of the WLEs successfully into their revisions. Moreover, 93% of the grammar WLEs and 92% of lexis WLEs were successfully incorporated. However, the percentage of the don't WLEs which was successfully incorporated was 57%. It shows that when the participants did not know the reason for the error, they could not correct them in the revision. That is, when they involved in languaging and produced grammar and lexis WLEs on the errors which were directly corrected, WLEs were much more successfully incorporated.

The results were in line with the ones gathered in some other studies. In Hanaoka's study (2007) the participants could incorporate 92% of LREs into subsequent revision. Similarly, for Qi and Lapkin's study (2001), the percentage of the LREs which were successfully incorporated was 70% and for Adams' study (2003) it is 61%. Besides, in Suzuki's study (2009), the average number of linguistic errors significantly decreased in revision and similar to the results of this study, if an error was explained, it was incorporated successfully, whereas if an error was not explained, it was not changed in the revision. As the findings obtained from various studies (Qi & Lapkin, 2001; Adams, 2003, Hanaoka 2007; Suzuki and Itagaki, 2009; Suzuki, 2012; Ishikawa, 2013), these findings suggest that languaging contributes to accuracy in L2.

4.3. Type of Written Languaging and Revision

The third research question was: Does the type of WLE (i.e., grammar versus lexis WLEs) have a differential effect on immediate revision? The results showed the percentages of the lexis and grammar WLEs which were incorporated into the revision were very similar (92% and 93%). That is, when the results were taken into consideration, it can be concluded that the type of WLEs do not have an important effect on successful incorporation.

The results were similar to the ones obtained in Adams' study (2003). In the study, lexis WLEs and grammar WLEs were equally incorporated into subsequent revision. More research is needed on the effects of different WLE types on successful incorporation into subsequent revision.

In this study, the results demonstrated that the participants were involved in grammar-based WLEs more than lexis-based and don't know WLEs. Secondly, the participants incorporated both lexis-based and grammar based WLEs into immediate revisions successfully whereas they had difficulties in incorporating don't know WLEs into the revisions. Finally, results indicated that the type of WLEs did not make an important difference in incorporation and accuracy of the revised paragraphs. The study supported the previous research on languaging and the results showed that languaging has a good effect on writing accuracy.

The study was not without limitations. The effect of written languaging was measured by immediate revision in this study. Its effect on improvement over prolonged time can be measured. Also, because of the number of participants, the results cannot be generalized.

As this study and many others in literature show, languaging improves accuracy and contributes to language learning. By making explanations related to their corrected errors, students notice their weaknesses, focus on the reasons for their errors and get involved in self-explanation which has an impact on L2 improvement. Teachers may create opportunities for learners to engage in languaging such as writing journals and portfolios and think aloud activities.

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