

## **Interlanguage Development of English Articles through Textual Enhancement\***

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The current study explores the conditions under which textual enhancement is effective for second language learners to better notice and learn particular grammatical features. The study employs the grammatical judgment test for collecting data rather than using production data, which has been commonly used in SLA research on interlanguage development of English articles. This is because learners in low levels of proficiency are found to frequently omit articles in production data while they have to actively choose one in multiple-choice cloze tests. The findings suggest that textual enhancement is useful for more advanced learners of English articles. Also, it is shown that, contrary to previous studies, the deletion of articles is more prevalent among more advanced students. In the grammatical judgment test, zero articles should not be considered the result of negligence, so it can also appear rather frequently in the performance of advanced learners of English. Based on this finding, more deletions and less overuse of *a(n)* can possibly be the indicator of acquisition. As a pedagogical implication, textual enhancement should be employed in a foreign language classroom, according to students' current proficiency in target features.

[textual enhancement/interlanguage development/acquisition of English articles/구문입력강화/중간언어발달/영어관사습득]

### **I. INTRODUCTION**

Textual enhancement is a form of input enhancement, and an implicit and unobtrusive means of drawing the learners' attention to form contained in the written input (Doughty & Williams, 1998). Its effect has been argued in second

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language acquisition (SLA) research, and many variables, such as task types, targeted items, students' proficiency, familiarity of text, frequency of exposure, individually different levels of meta-awareness and data collection method, are considered to affect the result (Seon-Yoo Hwang, 2006; Leow, 1997, 2001). At the same time, deletion and retention of articles and overuse of *the* and *a(n)* have been the primary measurements to determine L2 learners' interlanguage development of articles. Research suggested that there may be an order of acquisition and a sequence of acquisition for English determiners.

The current study employed the grammatical judgment test (i.e. multiple-choice cloze test) for collecting data rather than gathering production data (e.g. essay writing), which is often used by SLA research on interlanguage development of English articles. This is because learners in low level of proficiency are found to frequently omit articles in production data while they have to actively choose one in the multiple-choice cloze test. The current study explored how this change of data collection method affects the result, and in what condition textual enhancement was effective so that L2 learners can better notice and learn particular grammatical features.

## **II. Review of Literature**

### **1. Textual Enhancement in Second Language Acquisition**

Long (1991) divided a variety of foreign language teaching methods into three trends, such as "Focus on Forms," "Focus on Meaning" and "Focus on Form." Particularly, Focus on Form has been considered important to develop second language (L2) learners' competence since 1990. The gist of Focus on Form suggests that human attention capacity is limited, so it is important to distribute the learner's attention in an efficient way. Focus on Form is also divided into two learning/teaching methods, such as explicit and implicit teaching/learning, and one of the implicit teaching/learning methods is input enhancement.

Input enhancement refers to a pedagogic manipulation of the saliency of input with a view toward increasing the chance for encountered input to be efficiently rehearsed in a learners' working memory and thus to be ultimately integrated into

the existing L2 systems (Sharwood-Smith, 1993). Textual enhancement is one kind of input enhancement, and the method of textual enhancement is simply increasing the perceptual salience of the target form via combinations of various formatting techniques (e.g. bolding, capitalizing, or underlining) (Izumi, 2002). Through textual enhancement, learners are induced to focus on the formal properties of an L2.

While empirical studies suggested that L2 learners can benefit from textual enhancement (e.g. Overstreet, 1998, 2003), there have been different results in some studies of textual enhancement. At the lexical level, Barcroft (2003) investigated the effects of input enhancement in relation to the role of distinctiveness of vocabulary words. The study found that when 9 out of 24 Spanish words (concrete nouns) in a list were enhanced, input enhancement did not affect learning rates for the nine enhanced words. However, when three of the same 24 words were enhanced, it positively affected learning rates for the 3 enhanced words, but negatively affected learning rates for the other 21 unenhanced words.

Research on input enhancement at the morpho-syntactic level has produced mixed results. Some studies did not find any significant effects (Izumi, 2002; Jourdenais, 1998; Leow, 1997, 2001; Leow, Egi, Nuevo & Tsai, 2003; Moroishi, 1999; Overstreet, 1998; Williams, 1999; Wong, 2003), while others found limited effects of this pedagogical technique (Alanen, 1995; Robison, 1997; White, 1998). On the other hand, other studies demonstrated the positive effects of input enhancement (Doughty, 1991; Jourdenais, Ota, Stauffer, Boyson & Doughty, 1995; Leeman, Arteagoitia, Fridman & Doughty, 1995; Ja-Yeon Lim, 2007; Shook, 1994).

These different results may be because various intervening factors were involved in this line of research, such as task types, targeted items, students' proficiency, familiarity of text, frequency of exposure and individually different levels of meta-awareness. These variables make it difficult to make direct comparisons among them.

Regarding students' proficiency, Jourdenais (1998) noted, "the implicit nature of the enhancement ... was more likely to be beneficial to learners who already had some initial awareness of the forms and their use" (p. 92). He suggested that

learner proficiency level may be one decisive factor in determining the actual impact of visual input enhancement, although it has not been resolved yet how much prior knowledge learners should have to witness the desired effects of the technique.

In contrast to L1 reading contexts, where learners tend to prioritize meaning before form for comprehension (Skehan, 2003), in L2 reading, the interventions often pose to learners the demand of drawing their attention to form in addition to their primary task of meaning comprehension. Thus, when reading enhanced texts in their L2, the L2 learners are reading for content, and on the other hand, they are reading grammatical forms for acquisition. Given this nature of L2 reading, it is often suggested that it is useful to employ culturally familiar topics to minimize the attentional imbalance between form and meaning during L2 processing. Thus, familiar topics are thought to promote the reader's comprehension as well as his or her retention of textual material (Weber, 1991).

More recently, Jongbum Ha (2005) examined the effect of textual enhancement on developing English determiners by Korean EFL learners. Through 4 weeks of treatment, participants were required to read a textually manipulated passage in which all core-determiners and following nouns in the passages were highlighted and each of the core-determiners was underlined. The results showed that textual enhancement alone was not a significant factor to explain learners' noticing of determiners, but meta-awareness of the experimental group made a significant difference. Based on the result, Ha suggested that most readers merely attend to the content of passages for comprehension over form, and this tendency was consistent even during textual enhancement.

## 2. Interlanguage Development of English Articles in Second Language Acquisition

Experimental studies indicated that instruction is powerless to change the order/sequence of acquisition. Pienemann (1985, 1989) suggested that instruction directed at structures that were next in line to be acquired according to a well-defined developmental sequence was effective in moving learners along the sequence. In contrast, instruction directed at structures that were too

developmentally advanced for the learners proved ineffective. He called it the teachability hypothesis claiming "instruction can only promote language acquisition if the interlanguage is close to the point when the structure to be taught is acquired in a natural setting" (Pienemann, 1985, p. 37).

Regarding the studies on acquisition of English, Hakuta (1976) initiated the early study on ESL acquisition of articles by investigating the presence or absence of articles in obligatory contexts. The study was a 60 week longitudinal and non-experimental study when spontaneous speech by a child of 5 to 6 years old was regularly recorded and later transcribed in orthography. Hakuta considered two types of errors in the participants' article usage, termed "omission" (no use of an article in an obligatory context) and "commission" (the unnecessary use of "the" and "a"). Early stages of English learning shows frequent deletions of articles, and limited uses of the "the" and "a".

The use of English articles pertains to discourse referentiality (they refer or point to something in discourse). Bickerton (1981) provides a systematic approach to the analysis of English article usage. According to Bickerton, the use of the English articles—*a(n)*, *the*, and  $\emptyset$  (zero article)—is governed by the semantic function of the noun phrase (NP) in discourse. The classification of the semantic function of an NP is determined by two binary discourse features: (a) whether a noun has a specific referent (+SR) and (b) whether the hearer knows the referent (+HK). Based on such an analysis, NPs fall into four major semantic types.

Based on Bickerton's (1981) noun classification system, Huebner (1983) initiated a new direction of research on ESL article acquisition. Huebner classified the semantic functions of the NPs, which enabled him to examine and understand the learner's use of articles in the semantic context. Huebner's (1983, 1985) findings suggest that his adult L2 learner, who was a native speaker of Hmong, initially overused the definite article "the" with almost all nouns in his speech. The amount of overuse gradually decreased in [-SR, -HK] situations, and his participant began to use "the" almost exclusively in [+SR, +HK] and [SR, +HK] cases.

While Hakuta (1976) and Huebner (1983) studied only one participant, Master (2002) analyzed the spoken interlanguage of speakers of five different native languages: three with no article system (Chinese, Japanese, and Russian), and two

with article systems (Spanish and German). Data were elicited through informal interviews with four speakers of each language for a pseudo-longitudinal analysis of article usage. The results showed that participants whose L1 has no article system tended to overuse "the" in the [+SR, +HK] and [-SR, +HK] environments but not in [-SR, -HK] environments.

Liu and Gleason (2002) investigated the nongeneric use of the English definite article *the* that falls into four major categories: cultural, situation, structural, and textual. The participants (41 low-, 49 intermediate-, and 38 advanced-level students) were instructed to read the sentences and insert *the* wherever they deemed necessary. Findings showed that ESL students appeared to acquire situation use first, cultural use last, and structural and textual uses in between. Findings also showed that ESL students' underuse of obligatory *the* decreases significantly as their English proficiency improves.

In summary, deletion and retention of articles and overuse of *the* and *a* were the primary measurements to determine L2 learners' development of articles. Research suggested that there may be an order of acquisition and a sequence of acquisition for English determiners. Specifically, simpler forms and those that exist in learners' L1 may be learned earlier than those that do not. Additionally, although few differences were observed in these studies, the variety of methods for data collection and type of data should be considered as variables in future research.

### 3. Research Questions

Through the literature review, we learned that textual enhancement can contribute to the development of L2 function words. Research suggested, however, that there are many variables that we need to consider in this line of research. In the current study, these variables were considered in terms of the effect of textual enhancement for developing English articles. The following two research questions were formulated:

Research Question 1: Will the experimental group show the significant improvement in the use of articles in the posttest?

Research Question 2: How will English articles develop in the students' performance?

### III. Research Methods

#### 1. Participants

Participants were Korean students from four English reading classes at a university in South Korea. Originally, 248 students participated at the beginning of the experiment, but 26 students did not successfully finish all the assignments required for the experiment. The class of English reading is a course that all students at the university have to take as a requirement. Majority of the students were in their first year at the university. All the four classes were taught by the same instructor with the same textbook and teaching schedule. There was one control group of 115 students from two classes, and one experimental group of 107 students from the other two classes.

#### 2. Target Structure

The target structure was the English article, one of the core-determiners (See Celce-Murcia & Larsen-Freeman for detail about the determiner system (1999, p. 335). Therefore, they were the definite article (*the*), the indefinite article (*a* or *an*) and the zero article ( $\emptyset$ ), excluding the other core-determiners, such as possessives (e.g. *my, your, his, her, its, their, -'s*), demonstratives (e.g. *this, that, these, those*), and some quantifiers (e.g. *some, any, no, each, every, either, neither, enough*). While my previous research (Jongbum Ha, 2005) targeted the whole core-determiners, the current study reduced its target structure to the article. This is because students often used the other core-determiners instead of the article when they were not sure of its use, and consequently it was difficult to examine students' knowledge of the article system precisely.

#### 3. Instrument and Materials

The pretest and posttest design was employed, and the pretest and posttest were each a set of multiple-choice cloze tests in a story of several paragraphs from the supplementary reading of the textbook.<sup>1</sup> The students were asked to select the appropriate article from three possible choices—zero article, *the* and *a(n)*. Multiple-choice cloze tests were used so that student would not choose more than one possible answer. The materials were extracted from the supplementary reading of the textbook which had previously been studied in class with no focus on the use of articles. Therefore, all the students knew the content of the passage, and any potential intervening variable due to differential familiarity was controlled.

Each text for the textual enhancement session consisted of passages from the supplementary reading of the textbook. In the materials, both all core-determiners<sup>2</sup> and the following noun(s) were highlighted, and additional underlines were added on each of the core-determiners. All nouns in a noun phrase rather than the only head noun were highlighted because students were asked to find and circle each head noun as well as each article so that they were more aware of their usage. Nouns with no salient core-determiner were consisted to follow the zero article ( $\emptyset$ ), which was also highlighted and underlined.

#### 4. Treatment and Procedures

Data was collected through 8 weeks during the spring 2007 semester of study at a university in South Korea. In the 1st week, all the participants took the pretest. Between the 2nd and 7th week, students in the experimental group were required to read an enhanced passage per week and find and circle each article and the following head nouns. In contrast, no tasks were required for students in the control group. In the 8th week, all participants took the posttest.

All the materials for the pretest, treatment, and posttest were extracted from the chapters which the students had previously studied in class. By doing so, the intervening variable, familiarity of passage, was effectively controlled, and the

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<sup>1</sup> Reading for the Real World 2, by Zwier and Stafford-Yilmaz (2004).

<sup>2</sup> Among these determiners, the frequencies of  $\emptyset$ , *the*, *a(n)* are 776, 741 and 569 respectively.

students were expected to focus on form with no need of making an additional effort to understand the content of the passage.

The students in the experimental group answered the follow-up questionnaire about how much they were concerned with the content of the passage while doing the given task, and if it was easy for them to find the head nouns. Additionally, they were asked to answer about their learning preference, attitude, motivation, belief, self-rated proficiencies in reading and grammar, etc.

## 5. Data Collection and Analyses

Each analysis included descriptive statistics and statistical analysis for the dependent variables. Statistical analyses were performed in order to determine whether any group outperformed the other on the posttest and whether the difference in the dependent variables is statistically significant. For statistical analyses, independent samples t-tests were employed, and the statistical significance was set at a p-value of 0.05. SPSS (Statistical Package for the Social Sciences) 15.0 for Windows was employed to analyze the results.

The independent variables were treatment type (i.e. the control and experimental groups), and the dependent variables were the scores of tests and various types of errors shown in the pretest and posttest, such as the ratio of deletions to total errors ( $\emptyset$ ); the ratio of overuse of *the* to total errors; and the ratio of overuse of *a(n)* to total errors. Therefore, the scores in the pretest and posttest were presented and compared for the two independent variable. The ratio of deletions to total errors ( $\emptyset$ ) and the ratio of overuse of *the/a(n)* to total errors were then presented and compared in order to investigate how the difference in the scores is reflected in the misuse of determiners in the pretest and posttest.

## IV. Results

The results of the data analysis were presented in order to answer the two research questions. Each analysis includes the descriptive statistics and the statistical analyses of the dependent variables. The descriptive statistics show the

number of participants (N), and the mean, maximum, minimum and standard deviation (SD) of the dependent variables.

## 1. Research Question 1

Research Question 1: Will the experimental group show the significant improvement in the use of articles in the posttest?

Table 1 and Table 2 present descriptive statistics for the scores of the pretest and posttest for treatment type.

Table 1  
*Descriptive Statistics on Scores of Control Group (N=115)*

	Pretest	Posttest
Mean	47.35	43.79
Maximum	47.35	84.62
Minimum	24.14	7.69
SD	13.86	17.20

Table 2  
*Descriptive Statistics on Scores of Experimental Group (N=107)*

	Pretest	Posttest
Mean	48.34	42.61
Maximum	93.10	97.44
Minimum	20.69	7.69
SD	12.59	16.27

*Note.* The maximum scores for each test were originally 29 (pretest) and 39 (posttest), but they were reevaluated as percentage for easy comparison. Therefore, the numbers indicate percentage and their maximum value is 100 (%).

Independent samples test were performed on the scores of tests, and it was determined that there was no significant difference in the scores of pretest and posttest between groups ( $t=.854$ ,  $p=.394$ ). In answering the first research question, the experimental group did not gain significantly more in the posttest than the control group.

## 2. Research Question 2

Research Question 2: How will English articles develop in the students' performance?

To answer this question, total test scores in the pretest and posttest were analyzed along with other variables, such as ratios of deletions, overuse of *the* and *a(n)*, gain in the posttest (Gain), gap of deletion between the pretest and the posttest (Gap of  $\emptyset$ ), gap of overuse of *the* (Gap of *the*), gap of overuse of *a(n)* (Gap of *a(n)*). To determine which variables are correlated with gains in the posttest, Pearson's Correlations were run, and Table 3 presents correlations between variables.

Table 3  
Correlations of Total Test Scores, Gain, Gap of  $\emptyset$ , Gap of *the*, and Gap of *a(n)* (N=222)

	Total test scores	$\emptyset$	<i>the</i>	<i>a(n)</i>	Gain	Gap of $\emptyset$	Gap of <i>the</i>	Gap of <i>a(n)</i>
Total test scores	1	.485**	.234**	.287**	.231**	.099	-.010	-.100
$\emptyset$	.485**	1	.527**	.559**	.297**	-.156*	-.013	.152*
<i>the</i>	.234**	.527**	1	-.403**	-.107	-.040	.290**	-.232**
<i>a(n)</i>	.287**	.559**	.403**	1	.223**	.200**	-.272**	.053
Gain	.231**	.297**	-.107	.223**	1	.127	-.053	-.071
Gap of $\emptyset$	.099	-.156*	-.040	.200**	.127	1	-.455**	-.539**
Gap of <i>the</i>	-.010	-.013	.290**	-.272**	-.053	.455**	1	-.490**
Gap of <i>a</i>	-.100	.152*	.232**	.053	-.071	.539**	-.490**	1

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

The analyses of correlations showed that there are significant correlations between total test scores and  $\emptyset$ , between total scores and *the*, between total scores and *a(n)*, and between total scores and gain. Specifically, those who obtained higher total test scores show more ratios of deletions and less ratios of overuse of *the* and *a(n)*. Additionally, those who obtained higher total test scores from the pretest and posttest showed more gain in the posttest than those who obtained lower total test scores from the pretest and posttest.

The results also showed that correlations exist between gain and  $\emptyset$ , between gain and  $a(n)$ , between  $\emptyset$  and *the*, between  $\emptyset$  and  $a(n)$ , and between *the* and  $a(n)$ . Specifically, first, those who gained more in the posttest showed more ratios of deletions and less ratios of overuse of  $a(n)$ ; second, those who deleted more articles less overused *the* and  $a(n)$ ; and, finally, those who more overused *the* showed less overuse of  $a(n)$ . On the other hand, there were no correlations found between gain and the gap of ratios of either deletions or overuse of *the* and  $a(n)$ .

In addition to the analyses of correlations among variables, to ensure these findings, students' total test scores were divided into three groups: high (120 or more out of 200), average (between 90 and 119), and Low (less than 90), which were then statistically run in terms of gains, ratios of deletions, overuse of *the* and  $a(n)$ .

Table 4 to 6 present descriptive statistics and statistical analyses for gains, and total deletions( $\emptyset$ ), total overuse of *the* and total overuse of  $a(n)$  for leveled total test scores.

Repeated measures ANOVA and one-way ANOVA confirmed that there are significant differences in gains, in the ratios of total deletions of errors, and in the ratios of total overuse of *the* and  $a(n)$  among three comparisons. Specifically, more advanced students in terms of article use obtained more gains in the posttest, and chose more zero articles than less advanced group(s). Additionally, the group of high level overused *the* and  $a(n)$  less than the group of low level.

Table 4  
*Descriptive Statistics on Gains, Total Deletions, and Total Overuse of 'the' and 'a(n)' for Leveled Total Test Scores*

Leveled Total Test Scores		Gain	$\emptyset$	<i>the</i>	$a(n)$
High (N=40)	Mean	0.95	38.33	37.55	24.12
	Maximum	41.00	100	72.12	60.26
	Minimum	-46.00	3.33	0.00	0.00
	SD	21.03	18.96	15.21	13.40
Average (N=62)	Mean	-2.50	31.20	39.98	28.72
	Maximum	31.00	61.75	64.58	52.75
	Minimum	-65.00	3.33	14.68	2.38
	SD	21.98	12.27	12.29	12.53
Low (N=120)	Mean	-7.48	24.64	42.85	32.29
	Maximum	37.00	61.09	69.71	60.64
	Minimum	-51.00	3.33	12.16	2.63
	SD	17.34	10.40	11.10	12.21

Table 5  
*Repeated Measures on Gains for Leveled Total Test Scores*

Source	DF	SS	F	<i>p</i>
Group	1	44930.81		
Error	219	13313.48	369.55	.000**
Time	1	837.12	4.46	.036*
Time*Group	2	1268.77	3.38	.036*
Error	213	41153.20		

Table 6  
*One-way ANOVA for Total Deletions and Total Overuse of 'the' and 'a(n)' for Leveled Total Test Scores*

Choice of Article	SS	DF	F	<i>p</i>
Ø	6068.57	2	18.42	.000**
<i>the</i>	950.94	2	3.17	.044*
<i>a(n)</i>	2107.00	2	6.72	.001**

## V. DISCUSSION AND CONCLUSIONS

### 1. Discussion

1) Research Question 1: Will the Experimental Group Show the Significant Improvement in the Use of Articles in the Posttest?

The result showed that the experimental group did not gain significantly more in the posttest than the control group. Jongbum Ha (2005) suggested that because of the nature of reading, readers tend to attend to meaning for comprehension rather than attending to form, and this is the case even during reading textually enhanced material. He also suggested that meta-awareness during reading is necessary so that students can effectively learn target items. In the current study, for this reason, students were asked to conduct additional activities, such as finding the head noun and circling both head nouns and articles of each noun phrase.

Regarding the current result, however, we need to remember that no variables other than treatment type was considered. Furthermore, it is not clear that extra

activities induced students to be aware of the targeted forms. Considering participants are mostly in their first year at university, and the English article system is one of the most difficult items to acquire, it may not be a surprise that merely employing textual enhancement does not guarantee that all the students benefit learning of the target item. Therefore, it may be too early to say that textual enhancement was not helpful at all. To obtain a precise picture, we look at other variables and their mutual relationships between variables.

## 2) Research Question 2: How Will English Articles Develop in the Students' Performance?

The finding showed that there is a significant correlation between total scores and gain, which suggests that those who obtained higher total test scores gained more in the posttest than those of lower total test scores. While there was no significant difference in the gain between the control group and the experimental group, it is notable that more advanced students, at least in terms of article use, benefited from textual enhancement. This finding was confirmed through additional statistical analyses in which students' total test scores were divided into three groups (High, Average, and Low) and their relationships with ratios of deletions, overuse of *the* and *a(n)* as well as gains were investigated.

For this finding, as Jourdenais (1998) mentioned, learner proficiency level may be one decisive factor in determining the actual impact of visual input enhancement suggesting that some initial awareness of the forms and their use is necessary. Research suggested that advanced students benefit from implicit learning, while less advanced students do so from explicit teaching (e.g. Jourdenais, 1998). Considering textual enhancement is a form of implicit teaching/learning methods (Long, 1991), the finding suggests that textual enhancement is helpful only for those whose knowledge of English articles is more advanced.

Another result was that there are significant correlations between total test scores and  $\emptyset$ , between total scores and The and between total scores and A. Specifically, those who obtained higher total test scores show higher ratios of deletions and lower ratios of overuse of *the* and *a(n)*. The current results are different from previous studies (e.g. Master, 2002), which suggested that developmental sequence of acquisition of English articles is stages of deletions, overuse of *the*, overuse of *a(n)* and correct use of articles. We need to remember, however, that the current study employed the grammatical judgment

test (i.e. multiple-choice cloze test), while the production test (i.e. writing) was mainly used in the former studies.

In the production data, students often avoid the words they are not sure of, so ratio of deletion is consequently high. In contrast, the students were forced to choose at least one article as an answer in the multiple-choice cloze tests, in which each blank includes three options, such as zero article, *the* or *a(n)*. The zero article here is basically the same with deletions of articles, but, it means that, in the multiple-choice tests, students give more contemplation over article usage, and actively choose an article including the zero article. In this way, a zero article can always be an option in the multiple-choice cloze tests, whereas in the production data students may omit articles negligently, so deletions (or omissions) may be a more suitable term.

Finally, those who gained more in the posttest showed more ratios of deletions and less ratios of overuse of *a(n)*. Additionally, those who deleted more articles less overused *the* and *a(n)* and those who more overused *the* showed less overuse of *a(n)*, which are predictable in nature since they show relative frequency with each other. Along with the finding that deletions are more frequent among those who are more advanced in terms of article use, I cautiously suggest that more deletions and less overuse of *a(n)* can possibly be the indicator of acquisition.

## 2. Implications

The implication of this implication regards the use of textual enhancement for developing L2 grammatical features. It seems that textual enhancement may be useful in certain contexts, but not all contexts. There are variables that should be considered when employing textual enhancement in a foreign language classroom. First of all, based on the findings of the current study, foreign language teachers need to consider students' current proficiency in target features. Although meta-awareness is necessary and helpful for students to attend to and learn target features (Jongbum Ha, 2005), our finding showed that textual enhancement was useful for only those who are relatively more advanced in the use of the target item.

## 3. Limitations

The current study has methodological limitations that need to be considered for future research: First, although longitudinal research is normally used to examine change in learners' interlanguage system, the current study employed cross-sectional method in which students' use of the target language for their total test scores. In other words, the current study compared use of target features of advanced students with that of less advanced students in terms of their total test scores, so there is no data that contains sequence of acquisition by each student. Second, eight weeks of treatments may not be enough to look at interlanguage of the participants. Although some students showed minimal changes in the use of articles within this period, longer periods of treatment would have provided a more accurate picture. Also, the current study did not employ any delayed posttest that would measure its long-term effect.

#### 4. Conclusions

The findings of the current study lead to the following conclusions: First, the finding showed that textual enhancement was beneficial only for relatively advanced students, suggesting that textual enhancement, one of the implicit ways of teaching, is useful for those who are ready to learn a target item. Second, the finding showed that those who obtained higher total test scores show higher ratios of deletions and lower ratios of overuse of *the* and *a(n)*, which is different from previous studies. There are at least two variables that can explain this result. In the grammatical judgment test, zero article should not be considered to be the result of negligence, so it can also appear rather frequently in the performance of advanced learners of English. Based on this finding, more deletions and less overuse of *a(n)* can possibly be the indicator of acquisition. Finally, there are many variables to be considered for the research on textual enhancement, such as students' proficiency and individually different levels of meta-awareness. For future research, these variables should carefully be considered to obtain reliable findings.

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