

## **The Impact of Two Types of Input Modification on EFL Reading Comprehension: Linguistic Versus Interactional**

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### **Abstract**

This study investigates the relative effects of two types of input modification – linguistic and interactional – on Iranian EFL students' reading comprehension. Eight English reading passages were presented to 248 students in one of the three forms: unmodified (U), linguistically modified (LM), mostly in the direction of elaboration, and interactionally modified (IM). The students were also divided into two proficiency-level groups, i.e. more proficient (MP) and less proficient (LP) groups. Students' comprehension of the passages was measured through a 50-item multiple-choice test which was the same for all the six groups. The data were analyzed by a 2-by-3 analysis of variance (ANOVA). The results show that interactional modifications improve students' reading comprehension scores better than linguistic modifications at both proficiency levels. This suggests that linguistic modifications – even if they are made in the direction of elaboration as suggested by recent studies (Oh, 2001; Urano, 2002; Yano et al., 1994) – do not facilitate reading comprehension as effectively as interactional modifications do. Therefore, it is recommended that instead of making texts comprehensible through commonly-practiced techniques of simplification or elaboration, teachers employ authentic texts, but make them comprehensible through creating interactional modifications.

**Keywords:** elaboration, simplification, interactional modifications, linguistic modifications.

## 1. Introduction

A central issue in the theory of second language acquisition (SLA) is how learners' experience of a target language contributes to their language acquisition. All types of linguistic data from a target language that learners are exposed to and from which they learn are called *input*. Language input, therefore, is referred to as "the *sine qua non* of acquisition" (Gass & Alvarez Torres, 2005: 2). There is no theory or approach to SLA that does not recognize the important role of input. As a result, input studies have received considerable attention since the 1980s, especially after the formulation of the input hypothesis (Krashen, 1981, 1982, 1985).

An important consideration in this respect is how input becomes comprehensible to language learners. This, according to Long (1983a), is achieved either by means of input simplification or through modification of the interactional structure of conversation. These two ways are described as two common linguistic environments available to L2 learners.

## 2. Linguistic Modifications

The first kind of linguistic environment is characterized by input that has been modified, i.e. either simplified or elaborated, in some way before the learner sees or hears it. This is achieved through (a) repetition and paraphrase of words, phrases, or sentences, (b) restriction of vocabulary to common or familiar items, (c) addition of boundary makers and sentence connectors, and (d) reduction in sentence length and complexity through removal of subordinate clauses (Pica, Young, Doughty, 1987:738). Simplified input becomes available to the learners through different channels. Outside the class, it is provided through adjustments native speakers (NSs) make in their speech while addressing nonnative speakers (NNSs). This has been referred to as foreigner talk (Ferguson, 1971). Within the classroom, learners receives simplified input not only through teachers' adjustments of their speech, i.e. teacher talk, but also through simplified reading and listening materials.

The issue of using simplified materials has been of prime importance for the past three decades (Blau, 1982, 1990;

Chaudron, 1983; Dunkel, 1988; Honeyfield, 1977; Parker & Chaudron, 1987). The majority of the scholars in the field are of the opinion that linguistic modifications augment L2 learners' comprehension of listening and reading materials; however, it is not precisely known what types of modifications work best.

In a comprehensive review of the effects of different types of input modifications on L2 listeners' comprehension of academic discourse, Parker and Chaudron (1987) found that linguistic simplification in the form of simplified syntax and vocabulary failed to have a significantly positive effect on comprehension of the information. However, an elaborative modification e.g., a repetition of the information and clear segmenting of the thematic structure of the communication augmented comprehension of the L2 information presented orally.

Chiang and Dunkel (1992) also came to the same conclusion. In their study, the high proficient students who listened to the elaborated form of a lecture achieved higher scores than those who listened to the unmodified version of the lecture. This, however, was not the case for the low-proficient students of the study, which suggests that discourse redundancies improve listening comprehension.

It was studies of this type that directed the attention of L2 reading specialists toward elaboration rather simplification of texts. The results of similar studies (Oh, 2001; Urano, 2002; Yano, Long, Ross, 1994) have consistently shown that there is no significant difference between comprehension scores of the students who read the simplified texts and those who read their elaborated versions. This suggests that, if there is not much difference between these two types of modification, elaboration is to be preferred to simplification, for it "familiarizes nonnative readers with authentic features of target language input" (Oh, 2001: 91-92).

### **3. Interactional Modifications**

Long's interaction hypothesis (1981, 1983a, 1983b) maintains that linguistic modifications are not the only way which provide L2 learners with comprehensible input. A major feature of conversations involving L2 learners is that the learner and the native

speaker make a collaborative attempt to overcome the communicative difficulties which are always likely to arise as a result of the learner's limited L2 resources. This, as mentioned earlier, results in negotiation of meaning which takes place as a result of a number of interactional adjustments (Long, 1983b). These interactional adjustments are of two types. Some of them such as relinquishing topic control, selecting salient topics, and checking comprehension aim at avoiding conversational trouble. Some others such as requesting clarification, confirming own comprehension, and tolerating ambiguity aim at repairing discourse when trouble occurs. These devices, as Long (1983b) claims, not only serve to make input comprehensible but also result in acquisition of L2 forms.

In his updated version of the interaction hypothesis, Long (1996: 451-452) further argues that "*negotiation for meaning*, and especially negotiation work that triggers *interactional* adjustments by the NS or more competent interlocutor, facilitates acquisition because it connects input, internal learner capacities, particularly selective attention, and output in productive ways." Thus, through negotiation, the learners' attentional resources may be oriented to either a particular discrepancy between what they know about the L2 and what the L2 really is or an area of the L2 about which they have little or no information.

Since the early 1980s, there have been a number of studies to test Long's original claims regarding his interaction hypothesis. These studies generally fall into two broad categories. The first category deals with studies that examine the effect of interactional modifications on L2 learners' comprehension, and the second category is concerned with studies that explore the effect of interactional modifications on learners' production and subsequent acquisition of L2 forms.

### **3.1 Interactional Modifications and L2 Comprehension**

One of the early studies that specifically addressed the claim that negotiated modification promotes comprehension is Pica et al. (1987). The participants in this study, who were 16 NNSs of English, were asked to listen to a NS giving directions for choosing

and placing 15 items on a small board illustrated with an outdoor scene in two different input conditions. One group listened to a linguistically modified version of the script, with decreased complexity and increased quantity and redundancy. The second group listened to the same script without linguistic premodifications, but with opportunities for interaction with the native speaker. The findings of this study revealed that "comprehension was best assisted when the content of the directions was repeated and rephrased in interaction; however, reduction in linguistic complexity in the premodified input was not a significant factor in NNSs' comprehension" (Pica et al., 1987: 737).

### **3.2 Interactional Modifications and L2 Production / Acquisition**

There were two more studies in 1994 that shed further light on the effect of interactional modifications on both L2 comprehension and production/acquisition. One of these was the exploration of interaction and learner production by Gass and Varonis (1994). Although one aspect of their study of the effects of interaction on SLA – learner comprehension – had been the topic of prior work, learner production was relatively unexplored. Gass and Varonis compared prescribed modified and unmodified input with and without the opportunity for interactional modifications on both comprehension, as measured by the performance of learners when receiving directions on a task, and production, as measured by their NS partner's success in following the directions. They found that both negotiated and modified input positively affected NNS comprehension, compared with those who heard the unmodified script and could not negotiate around it. The unexpected finding in this study, however, was that interaction did not lead to better NS comprehension of NNSs. As Gass and Varonis (1994: 298) argue, "the results of interaction [for production] are not necessarily immediate." The measure for production improvement in the study above was NS ability to follow directions given by NNSs. If the NNSs' directions were comprehensible, the NS could follow them. Ellis, Tanaka, and Yamazaki (1994) found that interactionally modified input resulted in both better comprehension and more acquisition of new words than was the case with premodified input.

Ellis et al.'s study is concerned with two studies with a more or less identical design carried out with Japanese high school students. Three groups of relatively low-level learners were exposed to directions involving the placement of kitchen objects in a matrix picture of a kitchen and containing words (e.g., sink, dustpan, and dishwashing liquid) which a pretest had shown were either entirely or largely unknown by the students. The first group heard baseline directions, i.e. directions of the kind native speakers address to native speakers. The second group heard premodified directions, i.e. directions that had been modified by increasing redundancy and quantity of input and decreasing syntactic complexity. The third group heard the same baseline directions as the first group, but were given the opportunity to request clarification if they did not understand. In both studies, the third group achieved significantly higher levels of comprehension, and also performed better on immediate and delayed vocabulary posttests than the second group. In one of the studies, the third group was also shown to outperform the first group in vocabulary acquisition. This study, therefore, showed that interactionally modified input facilitates the acquisition of new word meanings.

In another study, Mackey (1999) set out to test whether opportunities to interact and negotiate for meaning would boost the knowledge of question formation among a group of ESL learners of English. The participants were low-intermediate adult learners, who undertook a range of information-gap tasks (e.g., story completion, spot the difference, picture sequencing) that required them to ask and answer questions. Some of the learners were allowed to negotiate meanings with their NS interlocutor, whereas the others were not. Besides, all participants carried out further tasks as pretests and as posttests. This study produced statistically significant results showing that the learners who had engaged in interaction progressed one or more stages in second language question formation, while the non-interactors failed to do so. Mackey's (1999) study, therefore, provided clear evidence "that taking part in interaction can facilitate second language development" (p. 565).

#### **4. The Study**

The present study aims to investigate whether interactional modifications, created as a result of a collaborative attempt between teachers and their students to negotiate meaning, enhance reading comprehension of the learners or not. Previous studies indicate that text modification promotes reading comprehension (Oh, 2001; Yano et al., 1994). However, they did not compare the effect of linguistic modifications with interactional modifications on reading comprehension. This study, therefore, is conducted to explore the effect of these modification types (i.e., linguistic and interactional) on reading comprehension of students at two different proficiency levels. To this end, the study is guided by the following research questions:

1. Will more proficient readers of modified texts (either linguistically or interactionally) comprehend them better than more proficient readers of unmodified texts?
2. Will more proficient readers of interactionally modified texts comprehend them better than more proficient readers of linguistically modified texts?
3. Will less proficient readers of modified texts (either linguistically or interactionally) comprehend them better than less proficient readers of unmodified texts?
4. Will less proficient readers of interactionally modified texts comprehend them better than less proficient readers of linguistically modified texts?

#### **5. Method**

##### **5.1 Participants**

A total of 248 students (115 males and 133 females) participated in the main study. The participants were all university students of various fields, with an average age of 22. All had enrolled in English courses intended to prepare them for the Test of English as a Foreign Language (TOEFL) at the Iran Language Institute. Their English proficiency ranged from a low of 420 to a high of 540, measured on an actual sample of the TOEFL test (ETS, 1998). Based on their TOEFL scores, the participants were divided into two proficiency-level groups: more proficient (MP) and less

proficient (LP). This division was made on the basis of the mean score and the standard deviation of the TOEFL, which were 480.41 and 58.93, respectively. The participants whose TOEFL scores were between 420 and 480, i.e. one standard deviation below the mean, formed the LP group, and those with the TOEFL scores between 480 and 540, i.e. one standard deviation above the mean, comprised the MP group.

The participants were distributed in twelve classes. Six classes included LP students, and the other six MP students. The participants were required to read eight passages under three conditions: unmodified (U), linguistically modified (LM), and interactionally modified (IM). The six classes at each proficiency level were randomly assigned to one of these three conditions. Thus, the twelve classes were labeled as (a) MP-U, (b) MP-LM, (c) MP-IM, (d) LP-U, (e) LP-LM, and (f) LP-IM, forming six major groups for this study.

## **6. Instruments**

### **6.1 Unmodified Reading Passages**

Eight unmodified reading passages – with an average length of 270 words – were presented to the participants in the control group of the study. To minimize the chance of the participants' probable prior familiarity with the passages, they were selected from different textbooks. The passages were of two types: four of them had narrative and the other four had expository text structures. To determine the text structure of the passages, three EFL university lecturers were asked independently to label them as either narrative or expository.

Finally, it ought to be mentioned that two important points were taken into consideration in selecting the passages. The first point was to ensure that the passages would allow both lexical and structural modifications, and the second consideration was to select passages that would not require culture-specific or discipline-specific background knowledge for comprehension.



## 6.2 Modified Reading Passages

In order to investigate the effect of linguistic modifications on reading comprehension, the reading passages underwent a number of changes. To be in line with the trend in recent studies (Oh, 2001; Urano, 2002; Yano et al. 1994), most of the modifications made were in the direction of elaboration rather than simplification. The major types of modifications made to the passages are as follows:

- a) **Lexical elaboration.** Whenever possible, the difficult words expected to be unknown to the participants were paraphrased.
- b) **Lexical simplification.** Whenever the context would not allow paraphrasing, difficult words with low frequencies were replaced by easier, high frequency vocabulary. This was determined by the frequency bands of the Bank of English used in Sinclair et al. (2001).
- c) **Syntactic elaboration.** Reduced adjectival and adverbial clauses were restored to their original forms by incorporating omitted elements such as relative pronouns and subordinate conjunctions into the reduced forms.

As can be observed from above, no attempt was made to make syntactic simplification for two similar reasons. First, the use of short, simple sentences in simplified texts is likely to result in "choppy, unnatural" (Blau, 1982: 525) discourse, which may impede, rather than facilitate, comprehension.

The following extract illustrates a sample of an unmodified passage with its corresponding modified version:

*Unmodified text;* Bats are not the dirty, bloodthirsty monsters that are portrayed to be in vampire films. These animals groom themselves carefully like cats and only rarely carry rabies. Of the hundreds of species of bats, only three rely on blood meals. In fact, the majority eat fruit, insects, spiders, or small animals.

*Modified version;* Bats are not the dirty, bloodthirsty monsters that are described to be in vampire films such as *Dracula*. These animals clean themselves carefully like cats and only rarely carry rabies, a disease that causes madness or even death. Of the hundreds of

species of bats, only three rely on blood meals. In fact, the majority eat fruit, insects, spiders, or small animals.

In the modified version, high-frequency words such as *describe* and *clean* were used instead of *portray* and *groom*, as instances of lexical simplification. Moreover, the phrases such as *Dracula* and *a disease that causes madness or even death* were added to clarify *vampire films* and *rabies*, as instances of lexical elaboration.

### **6.3 Reading Comprehension Test**

The participants' comprehension of the information in the passages was measured through a 50-item multiple-choice test consisting of either six or seven items for each of the eight passages. All the participants took the same test, irrespective of the type of input they were exposed to. The questions were of various types, including: main idea, pronoun reference, stated detail, unstated detail, inference, and sentence insertion question types.

## **7. Procedures**

### **7.1 Pilot Studies**

In addition to the main study, this study involved four pilot studies. The purpose of the first pilot study was to find reading passages of appropriate level of difficulty for the main study. As a preliminary step, twelve reading passages – six with narrative and six with expository structures – were selected. The difficulty level of the passages was measured through the cloze procedure, which "is superior in validity to any other techniques that have been proposed" (Oller, 1979: 376) and can "provide a more accurate estimate of readability since it involves real readers processing texts" (Alderson, 2000: 72). The results obtained after scoring the passages through the exact word method showed that nine of the passages had a cloze score of between 44% and 53%, i.e. "the instructional level, and three of them had a cloze score of below 44%, i.e. "the frustrational level" (Oller, 1979: 353). Thus, the passages at the instructional level were kept for the next pilot study.

The purpose of the second pilot study was to modify the nine remaining passages and measure their reading difficulty. As mentioned earlier, the modifications made to the passages in this study were mostly in the direction of elaboration rather than syntactic simplification. The difficulty level of these modified passages was then measured through the cloze procedure. The results obtained after scoring the passages through the exact word method revealed that all but one of them had a cloze score of above 53%. This suggests that the remaining eight passages, through the process of modification, had been made easier (Oller, 1979: 353).

The next step of the study involved constructing the reading comprehension items followed by their analysis.

In this phase of the study the poor items were either revised or replaced by better items. Finally, in the last pilot study, the whole test, consisting of eight passages and fifty multiple-choice comprehension questions, was pre-tested once more to determine its reliability. The obtained reliability coefficient, calculated through Kuder-Richardson 21 formula, was .78, which was at an acceptable level.

## **8. Main Study**

As mentioned before, the participants in this study were distributed in twelve classes which were randomly assigned to control and experimental groups. All classes were taught by highly-qualified teachers. Before starting the treatment sessions, the researcher had a briefing session with all the teachers involved in the study, in which, in addition to the purpose of the study, he informed them of the procedure they were to follow.

The treatment for each class occurred over two consecutive sessions. Each session, the students read two expository and two narrative passages. The researcher attended all the treatment sessions as a non-participant observer, and made extensive notes of all the interactional exchanges between the students and their teachers. The following scenario gives a detailed account of what happened in each treatment session.

The teacher handed out one of the passages to the students and asked them to read it in 8 minutes. The students did not have access

to the questions at this time. The teacher encouraged the students to interrogate the text by continually asking themselves questions like "What does the author mean by saying this?", or "I don't understand this word: does it matter? Can I guess its meaning from the context?" These "text talk" techniques (Nuttall, 1996: 37) had been taught to the students in the first few sessions of the course, so they knew how to talk through texts and communicate with the author by underlining certain parts or jotting down notes in the margin of the texts.

At the end of the allowed time, the teacher had the students stop reading and begins to ask questions about the parts they had problem with. This was the most important part of the experiment in which the students' self-initiated interaction with the teacher obliged them to negotiate for meaning. The interactional modifications which were made as a result of this negotiation process elaborated the written discourse by providing students with examples, paraphrases, and even extralinguistic information. The devices employed by the students in the negotiation process were mainly clarification requests and confirmation checks.

When the students' questions finished, the teacher handed out the comprehension questions immediately, and had the students answer them in no more than 7 minutes. When the allowed time finished, the teacher handed out the next passage and the same procedure was followed.

One important thing that was taken into consideration by the researcher was the amount of time the students spent while interacting with their teacher. The mean time spent on interactive work for each passage was 5 minutes for the students in the more proficient group, and 7 minutes for the students in the less proficient group.

The treatment for the non-interactive classes, i.e those in which the students read the unmodified and the linguistically modified passages also occurred over two consecutive sessions. Each session students read two narrative and two expository passages. However, this time they were given the passages and the questions at the same time, and were not allowed to ask questions either during or after reading the passages.

One serious problem with most studies concerned with the effect of interactionally modified input on students' comprehension is that the students in these experimental groups often have the added advantage of the time factor. As Ellis (2003: 54) observed, it is not clear whether interactionally modified input "works because it enables learners to sort out misunderstandings, and construct a shared mental model of the task...Or does it work simply because learners have more time to process input?"

This is the reason why the researcher kept track of the mean time devoted to interactive work for each passage. In order to keep the balance for this extra time, the students in the unmodified and linguistically modified groups were given an extra time of 7 minutes for each passage in the less proficient groups, and 5 minutes for each passage in the more proficient groups. Therefore, instead of reading and answering the questions of each passage in 15 minutes, the students in the less proficient groups were given 22 minutes, and the students in the more proficient groups, 20 minutes for each passage. It should be noted that very few of them, however, needed this rather long time (at most 90 minutes) to finish four passages.

## **9. Data Analysis**

The data obtained through the procedure described above were divided into groups according to both the students' proficiency level (more proficient and less proficient) and the input type (unmodified, linguistically modified, and interactionally modified). This produced six groups: (a) MP-U, (b) MP-LM, (c) MP-IM, (d) LP-U, (e) LP-LM, and (f) LP-IM, consisting of 248 students who were present in both sessions of treatment for each group.

The data analysis was carried out with the SPSS statistical software package (version 13), with alpha set at .05. The data were analyzed by means of a 2-by-3 analysis of variance (ANOVA).

## **10. Results**

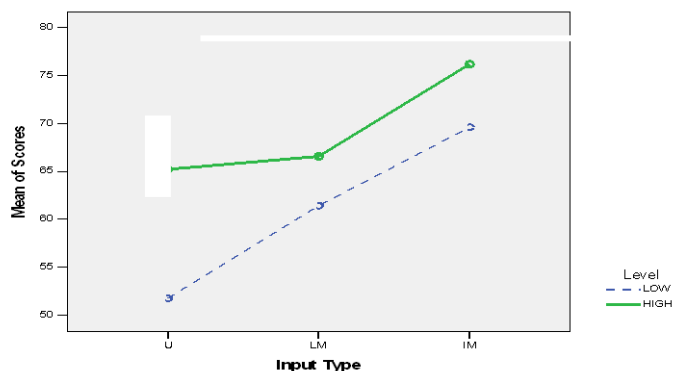
The scores of the students on the 50-item RCT were calculated out of 100. The mean scores of the students, as shown in Table 1, indicate that students in the MP group who read the passages

through interaction with their teacher scored highest ( $M = 76.20$ ), followed by those who read the linguistically modified version of the passages ( $M = 66.57$ ); those who read the unmodified passages scored the lowest ( $M = 65.22$ ). In the LP group, students reading the passages through interactional modifications performed better ( $M = 69.61$ ) than those reading the linguistically modified versions ( $M = 61.43$ ), and those reading the unmodified texts again scored the lowest ( $M = 51.76$ ).

**Table 1:** Means and standard deviations of total reading comprehension scores

Group	<i>n</i>	<i>M</i>	<i>SD</i>
MP-U	41	65.22	6.22
MP-LM	42	66.57	7.15
MP-IM	40	76.20	4.93
LP-U	42	51.76	6.25
LP-LM	42	61.43	6.17
LP-IM	41	69.61	6.97

A comparison between the groups is shown in Figure 1.



**Figure1:** Means of total reading comprehension scores

In order to investigate the effect of modification type and learner proficiency on total reading comprehension scores, a two-way ANOVA was carried out, the results of which indicated that there was a significant effect for modification type on total reading comprehension scores,  $F(2, 242) = 107.92$ ,  $p = .0001$ . There was also a significant difference between the learners' English proficiency and their reading comprehension scores,  $F(1, 242) = 108.92$ ,  $p = .0001$ . Moreover, there was a significant interaction between learner proficiency and modification type,  $F(2, 242) = 10.21$ ,  $p = .0001$  (see Table 2).

**Table 2:** Two-way ANOVA for total reading comprehension scores

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Sig</i>
Modification Type	2	8659.92	4329.96	107.92*	.0001
Proficiency Level	1	4370.06	4370.06	108.92*	.0001
Modification Type × Proficiency Level	2	819.80	409.90	10.21*	.0001
Error	242	9709.37	40.12		

\* $p < .05$ 

A post-hoc Scheffe' test was carried out to identify specific differences between the means of the six groups (see Table 3). The results indicated that the MP students outperformed the LP students on all three modes of text presentation (U, LM, IM) to a significant degree. Regardless of their proficiency level, the students who had read the passages through interaction with their teacher performed significantly better than those who had read the linguistically modified version of the passages (mean difference = 9.63 [MP], 8.18 [LP]). Not surprisingly, students in the interaction groups at each proficiency level performed significantly better than those who had read the unmodified passages (mean difference = 10.98 [MP], 17.85 [LP]). Finally, the test scores of the students who had read the linguistically modified passages was higher than those who had read the unmodified passages, but the difference was significant only for the LP students (mean difference = 1.35 [MP], 9.67 [LP]).



**Table 3:** Scheffé test of differences across the six groups for total comprehension scores

Groups	Comparison Between Groups	Mean Difference	Sig.
MP-IM	MP-U	10.98*	.0001
	MP-LM	9.63*	.0001
	LP-U	24.44*	.0001
	LP-LM	14.77*	.0001
	LP-IM	6.59*	.001
MP-LM	MP-U	1.35	.967
	LP-U	14.81*	.0001
	LP-LM	5.14*	.019
	LP-IM	-3.04	.446
LP-IM	MP-U	4.39	.084
	LP-LM	8.18*	.0001
	LP-U	17.85*	.0001
LP-LM	MP-U	-3.79	.195
	LP-U	9.67*	.0001
MP-U	LP-U	13.46*	.0001

\* $p < .05$ 

## 11. Discussion

### 11.1 Effect of Interactional Modifications on Overall Reading Comprehension

As shown in Tables 1 and 3, students who read the passages through interaction with their teacher scored significantly higher on the Reading Comprehension Test than students who read either the linguistically modified or unmodified version of the passages. This was true for both proficiency levels of the study.

Therefore, it can be concluded that interactional modifications improved reading comprehension to a significant degree. Irrespective of their proficiency level, students who benefited from interaction with their teacher had a better comprehension of the

passages than those who read them without interaction. This is not surprising when comparison is made with students who read the unmodified passages. Clarification sought through interaction with the teacher could have helped students in the IM group comprehend the texts better than those who read them without this opportunity. What seems to be rather surprising is the better performance of the IM group than the LM group, especially at MP level. This shows that interactional modifications were a more effective device for reading comprehension than linguistic adjustments. This confirms the findings of previous studies (Ellis et al., 1994; Pica et al. 1987;), though they were concerned with listening rather than reading comprehension, at least for the LP students. As for the MP students, the findings are new, for the participants involved in previous studies were either beginning or low-intermediate students. Although the modified texts had become more readable mainly in the direction of linguistic elaboration, it is obvious that the elaborative work taking place through negotiation of meaning had a more significant role in the students' overall comprehension of the passages.

### **11.2 Effect of Linguistic Modifications on Overall Reading Comprehension**

Tables 1 and 3 show that the more proficient students who read the linguistically modified passages did not do better than those who read the unmodified passages. However, unlike the more proficient students, their less proficient counterparts.

Therefore, it can be concluded that the LP students benefited from linguistic modifications, but the MP students did not. This implies that language proficiency plays an undeniable role in reading comprehension. When students reach a threshold level of language proficiency (Cummins, 1979), they can read authentic materials without any modification regardless of whether it is simplification or elaboration. This is not consistent with the findings of Chiang and Dunkel (1992), who observed that linguistic elaboration worked more effectively for the high-proficient (HP) students than for the low-proficient (LP) students. The results, however, confirm the findings of Yano et al. (1994), who observed that both simplified

and elaborated passages improved comprehension of Japanese students better than unmodified passages, though it should be acknowledged that students in their study were supposedly low-intermediate students. Finally, the findings of the study have partial support for Oh (2001), who found that both the LP and HP Korean students performed better on the elaborated passages than on the unmodified ones.

## 12. Conclusion

The results of the present study provide further empirical support for Long's (1981, 1983a, 1983b, 1996) interaction hypothesis, which claimed that negotiated interaction facilitates learners' comprehension. Consistent with the findings of the previous studies (Ellis et al., 1994; Pica et al., 1987), the results of the present study show that, all other things being equal, learners who have a chance to negotiate meaning immediately after they read a text have a higher probability of comprehending it than those who read the premodified version of the same text.

The findings also suggest that unlike interactional modifications, linguistic modifications were not very effective in promoting students' reading comprehension, at least for the MP students. The observed pattern was that for the MP students they failed in all cases, whereas for the LP students they were always successful.

This is in line with the previous studies (Oh, 2001; Yano et al., 1994), which found that linguistic modifications promoted reading comprehension of the LP students. Nevertheless, it does not corroborate their findings for the MP students.

This study has an important implication for reading classes: if reading passages are to become optimally comprehensible, it should no longer be the teachers' sole prerogative to ask questions. Moreover, the scope and purpose of questions should extend beyond mere student display, and teacher evaluation. As Nuttall (1996: 182) argued, good questions are not attempts to expose the students' ignorance; they are "aids to successful exploration of the text." Even so, teachers should become aware of the fact that texts do not become comprehensible only through *their* questions. Rather, students' questions play a major role in input comprehension

as well. As early as 1983, Whitaker contended that it should be learners rather than teachers who think up and ask the questions in reading comprehension classes. Whitaker based his proposal on the general observation that in daily life people learn by "interrogating the environment" (p. 329), searching for clues to confirm their understanding of new events. Inside the classroom, however, everything is different, for there is always a supposedly omniscient teacher who knows all the answers. The students' task, therefore, is to please the teacher by answering his or her display questions. Whitaker (1983) argued that by allowing learners to ask the teacher about the text, the questions they ask will be relevant to their own developing understanding of the text, to *their* current perceptions of what is important and difficult in it. Thus, given the chance to set their own questions, students will mainly ask real questions about the points that are unclear to them.

The study also recommends the use of authentic materials in reading classes. There are many researchers who strongly advocate authenticity and stress its motivating effect on learners (Aebersold & Field, 1997; Bacon & Finneman, 1990; Carbery & Yoshida, 2003; Kuo, 1993). These researchers have argued that becoming a competent second / foreign language reader means being able to read unmodified texts. There can be no doubt, therefore, that the ultimate goal of second / foreign language reading instruction is for students to read unmodified materials. However, authentic materials, in reality, prove to be overwhelmingly difficult for students at elementary and low-intermediate levels. As Nuttall (1996: 177) rightly argued, "they are unlikely to be suitable for developing most reading skills, especially if they result in the use of translation, or any kind of substantial intervention from the teacher." Therefore, in practice, teachers resort to simplified materials, the problems in using of which were partially touched on before. So there seems to be a paradox. On the one hand, it is claimed that to become competent readers, learners should be trained through authentic materials from the outset; and on the other hand, it is argued that early exposure to these materials may, at times, be frustrating to them.

In recent years, elaboration, rather than simplification, of texts has been offered as a remedy for this problem (Oh, 2001; Parker & Chaudron, 1987; Yano et al., 1994). These researchers have argued that some changes such as rephrasing, repetition, and parenthetical elaboration of key lexical elements will make the texts more comprehensible.

Elaborative modifications, undoubtedly, make authentic texts easier to read, but in the researcher's opinion, there are two potential problems in using them. First of all, the process of elaborating a text is probably more difficult than simplifying it, as it involves adding redundant information to the text. At times, elaborating a text amounts to rewriting it. This may be so challenging a task for many EFL teachers. Second, there is no guarantee that the elaborated version represents features of authentic input. In other words, the same criticisms that were sharpened against simplified texts hold true for elaborated texts as well, for any kind of modification is likely to distort the natural tone of an otherwise authentic text. Therefore, elaborated texts, like their simplified counterparts, run the risk of artificiality.

Regarding selection of appropriate reading materials, the results of this study discourage the use of modified texts for more proficient students, for, as indicated in the previous chapter, text modification did not improve their comprehension scores. For the less proficient students, however, the results offer a compromise between employing authentic materials and their comprehensibility. The results suggest that if oral interaction between students and teacher is encouraged, authentic materials can provide comprehensible input for students.

In conclusion, perhaps the most important pedagogical implication of this study is that any teacher or method that facilitates a realignment of the traditional roles of teacher and student, so that students are given a chance to assume more responsibility for their learning, is likely to produce oral interaction, which in turn can promote comprehension of classroom input.

## References

- Aebersold, J. A., & Field, M. L.** (1997). *From Reader to Reading Teacher: Issues and Strategies for Second Language Classrooms*. Cambridge: Cambridge University Press.
- Bacon, S. M., & Finneman, M. D.** (1990). A study of the attitudes, motives and strategies of university foreign language students and their disposition to authentic oral and written input. *Modern Language Journal*, 74, 459-473.
- Blau, E. K.** (1982). The effect of syntax on readability for ESL students in Puerto Rico. *TESOL Quarterly*, 16, 517-528.
- Blau, E. K.** (1990). The effect of syntax, speed, and pauses on listening comprehension. *TESOL Quarterly*, 24, 746-753.
- Carbery, S., & Yoshida, R.** (2003). Graded vs authentic: Do graded readers take the fun out of reading? Retrieved August 20, 2005, from <http://www.elicos.edu.au/ea-conference03/proceedings>
- Chaudron, C.** (1983). Simplification of input: Topic reinstatements and their effects on L2 learners' recognition and recall. *TESOL Quarterly*, 17, 437-458.
- Chiang, C., & Dunkel, P.** (1992). The effect of speech modification, prior knowledge, and listening proficiency on EFL lecture learning. *TESOL Quarterly*, 26, 345-374.
- Cummins, J.** (1979). Linguistic interdependence and the development of bilingual children. *Review of Educational Research*, 49, 221-251.
- Dunkel, P.** (1988). The effect of delivery modification on note taking and comprehension of L2 lectures. *Journal of Intensive English Programs*, 2, 41-52.
- Ellis, R.** (2003). *Task-Based language Learning and Teaching*. Oxford: Oxford University Press.
- Ellis, R., Tanaka, Y., & Yamazaki, A.** (1994). Classroom interaction, comprehension, and the acquisition of L2 word meanings. *Language Learning*, 44, 449-491.
- Ferguson, C.** (1971). Absence of copula and the notion of simplicity: A study of normal speech, baby talk, foreigner talk and pidgins. In D. Hymes (Ed.), *Pidginization and Creolization of Languages* (pp. 141-150). Cambridge: Cambridge University Press.

- Gass, S. M., & Alvarez Torres, M. J.** (2005). Attention when? An investigation of the ordering effect of input and interaction. *Studies in Second Language Acquisition*, 27, 1-31.
- Gass, S. M., & Varonis, E. M.** (1994). Input, interaction, and second language production. *Studies in Second Language Acquisition*, 16, 283-302.
- Honeyfield, J.** (1977). Simplification. *TESOL Quarterly*, 11, 431-440.
- Krashen, S. D.** (1981). *Second Language Acquisition and Second Language Learning*. Oxford: Pergamon.
- Krashen, S. D.** (1982). *Principles and Practice in Second Language Acquisition*. Oxford: Pergamon.
- Krashen, S. D.** (1985). *The Input Hypothesis: Issues and Implications*. Harlow: Longman.
- Kuo, C. H.** (1993). Problematic issues in EST materials development. *English for Specific Purposes*, 12, 171-181.
- Long, M. H.** (1981). Input, interaction and second language acquisition. In H. Winitz (Ed), *Native Language and Foreign Language Acquisition* (pp. 259-278). Annals of the New York Academy of Sciences 379.
- Long, M. H.** (1983a). Native speaker/non-native speaker conversation in the second language classroom. In M. Clarke & J. Handscombe (Eds.), *On TESOL' 82* (pp. 207-225). TESOL, Washington, D.C.
- Long, M. H.** (1983b). Native speaker/non-native speaker conversation and the negotiation of input. *Applied Linguistics*, 4, 126-141.
- Long, M. H.** (1996). The role of the linguistic environment in second language acquisition. In W. C. Ritchie & T. K. Bhatia (Eds.), *Handbook of Second Language Acquisition* (pp. 413-468). New York: Academic Press.
- Mackey, A.** (1999). Input, interaction, and second language development: An empirical study of question formation in ESL. *Studies in Second Language Acquisition*, 21, 557-587.
- Nuttall, C.** (1996). *Teaching Reading Skills in a Foreign Language* (2nd ed.). Oxford: Heinemann.

- Oh, S-Y.** (2001). Two types of input modification and EFL reading comprehension: Simplification versus elaboration. *TESOL Quarterly*, 35, 69-96.
- Oller, J. W.** (1979). *Language Tests at School: A Pragmatic Approach*. London: Longman.
- Parker, K., & Chaudron, C.** (1987). The effects of linguistic simplifications and elaborative modifications on L2 comprehension. *University of Hawaii Working Papers in ESL*, 6, 107-133.
- Pica, T., Young, R., & Doughty, C.** (1987). The impact of interaction on comprehension. *TESOL Quarterly*, 21, 737-758.
- Sinclair et al.** (2001). *Collins COBUILD English Dictionary* (3rd. ed.). London: HarperCollins.
- Urano, K.** (2002). Effects of simplification and elaboration on L2 comprehension and acquisition. Retrieved August 20, 2005, from <http://www2.hawaii.edu/~urano/research/slrf2002/>
- Whitaker, S.** (1983). Comprehension questions: About face! *ELT Journal*, 37, 329-334.
- Yano, Y., Long, M. H., & Ross, S.** (1994). The effects of simplified and elaborated texts on foreign language reading comprehension. *Language Learning*, 44, 189-219.