



# The Effects of Output Noticing in a Written Recall Task

Hiromi Martin

## Abstract

This study investigates the effects of output with noticing in a written recall task. The participants were 46 university students who were enrolled in a course of listening and speaking. For the study, 20 out of the 46 students' data were collected. The participants were divided into two groups: an input-only group and an input-output-input group. They carried out a multi-stage written recall task. They listened to the same passage twice and rewrote it. The result revealed that the input-output-input group was affected by noticing in their output recall protocols more than the input-only group.

## 1. Introduction

### Background

“Listening and Speaking on CALL” is one of the compulsory EFL learning courses at Bunkyo University. The learners use the ALC NET WORK ACADEMY run by CALL, Computer-Aided Language Learning. In

CALL, there are varieties of drilled-practices for university students who are learning English as a Foreign Language. The educational materials are organized according to the students' needs: “listening & speaking”, “reading & writing”, “grammar practices”, and “TOEIC practice”, etc.

This study focuses on finding the relationship between input and output with “listening & speaking” materials on the ALC NET WORK ACADEMY on CALL.

The current trend in English Education requires more output skills such as writing and speaking. For example, in CLIL, Content-and-Language-Integrated-Learning, the learners tend to notice production of the target language in speaking and writing. CLIL theory is based on an integrated approach, where both content and language are included in learning and teaching (Dale & Tanner, 2015). In this course, the students are often required to present short speeches in a class. They have chances to listen to the

target language not only from the CALL materials, but also from their classmates. The learners also learn the target language through listening to their classmates' presentations in class. Therefore, the basic concept of CLIL is applied in this class, at which point the learners use vocabulary, grammar and phrases from their input activities and present their ideas or opinions in speaking or writing tasks on the content based topic. The students in this class use the ALC NET WORK ACADEMY for materials. They can then reuse the phrases or the vocabulary on the materials in output activities such as a topic based presentation. For instance, the learners were required to present on their best trip and starting a burger business, etc. During their presentations, the learners tried to speak English fluently and accurately and to communicate with the audience. The learners practiced their pronunciation and intonation with shadowing drills in the speaking part after each listening unit.

Regarding the approach of CLIL, the students are exposed to a great deal of input from their teacher or classmates. In the case of the CALL class, the students receive an adequate amount of input through the CALL. In the ALC NET WORK ACADEMY listening part, the learners listen to stories or dialogues individually for self-study. Then, in the class, the learners are required to give a topic-based presentation to listen to each other.

This present study investigates particularly how the learners produce recall protocols in writing after listening. The aim is to see the effects of noticing in written recall protocols.

## **2. Theoretical Framework**

### **2.1. Output noticing/ Hypothesis**

In Second Language Acquisition studies, output is a part of the process in language production. While learning languages, learners encounter a gap in his or her linguistic knowledge of the second language. In learning, learners become aware of their mistakes and modifications (Swain, 1995). Swain proposed that noticing the function of output might prompt learners to realize a hole or a gap between the target language and the production of the learners. In other words, learners cannot say or write exactly what they need to convey meaning. At this point, the learners recognize their target language linguistic problems and pay attention to their production. This is called "noticing hypothesis" in one of Swain's studies (1995). Also research (Izumi et al, 1999) was conducted whether output production was promoted to notice the target linguistic form or not. The result showed partial support for Swain's output hypothesis (1995). In addition, Schmidt (1995) mentioned that learners needed to notice the target language linguistic forms in input as a part of the input process.

On the other hand, input alone is not sufficient for acquiring a second language. In the process of acquiring the target language, the learners often hear the language, and interpret the meaning without the use of syntax. In other words, learners may shift focus in their output activities from semantic processing to syntax (Swain, 1985,p.249).

In general, output has been seen not as

a place for creating knowledge, but as a process of practicing existing knowledge. In traditional second language learning, output activities take place with presentation-practice such as drills and repetition (Gass & Selinker, 2008). However, Swain (1985) introduced the notion of comprehensible output, or “pushed” output in her paper. The concept of “pushed” output occurs in the production as a necessary part of making the learners understood. In noticing their production, the learners might modify a previous utterance or they might discover forms that they had not used before.

In addition, comprehensive output indicates that learners are pushed toward delivering a message that is not only conveyed, but that is conveyed with accuracy, coherence, and appropriateness (Swain, 1985). Output may stimulate learners’ knowledge in semantic, open-ended, non-deterministic, strategic processing. Thus, the learners pay attention to complete grammatical processing to produce their output more precisely (Swain, 1995,p.128).

## 2.2. Retrospective protocols

The retrospective protocols are used to measure learners’ interaction research. In other words, they are stimulated recall protocols ( Gass & Mackey, 2000). The learners were required to recall their thoughts, consisting of their memories of what they had said while doing the task. (Mackey,et al, 2000 ). In written recall protocols, reading comprehension, lexical richness and propositional representations can be seen. The lexical richness is a measure of how many different words are

used in a text, while the propositional representations are a unit of meaning consisting of two or more concepts, such as a phrase or a sentence in discourse memory of the meaning, apart from the exact words used (Carroll, 2008).

## 2.3. Previous Study

Basterrechea and Leeser (2014) investigated the role of output tasks in noticing tenses on receiving subsequent input; a past and a present form in their studies in the CLIL Classroom. This study was divided into two groups; an individual and a collaborative group. The results of the study revealed that the learners’ noticing was more in the pushed output with constant input and the learners also paid more attention to the target language forms. On the other hand, no significant difference was shown in the corrections of the past form in pushed output tasks in either group. The pair-working group did not gain better results than the individual one. In this study, the learners paid attention to their production after listening to the passage for the second time and corrected the form of the present tenses. The learners noticed the usages of third person singular-s. The pushed output production promoted noticing on subsequent input while listening to the passage. Theoretically, the results indicated that their original output with subsequent input supported the output hypothesis (Swain, 1995). In addition, a similar previous study also showed that noticing thorough output tasks occurred and produced more output production ( Mahmoudabadi, *et al.*, 2015).

### 3. 1. The aim of this study

The main purpose of this present study is to investigate the effects of pushed output for university students in a listening and speaking course using ALC NET WORK ACADEMY. The participants are required to present a content-based presentation in class, and they learn English with the content. The participants also listen to others and learn the language. The ALC NET WORK ACADEMY provides the learners more pattern practices such as pronunciation, intonation, and new vocabulary. While, in the content-based oral presentation time, the learners learn the target language through more meaning-oriented communication. The learners pay attention to the form, meaning, and function of language in an integrated language-learning environment (Izumi, 2000).

There were two groups. The experimental group listened to the passage from the ALC NET WORK ACADEMY and produced the first written recall. Then, the participants listened to the passage again and corrected their first production. This group is called “input-output-input” group. On the other hand, the comparison group listened to the same input twice and produced the written recall protocols. They did not have a chance to recheck their production. This is regarded as an “input-only” group. This study attempted to observe how the participants noticed their recall protocols with subsequent input after output production and how they corrected their first writing.

Based on the theoretical background and the findings from previous research, the

present study addressed the following research hypotheses:

1. Does output in a written recall task affect learners’ noticing of English in producing recall protocols?
2. Does an “input-output-input” group write more recall protocols than an “input-only” group?

### 3.2. The setting and participants

The present study was carried out in a compulsory English class for first year students aged between 18 and 19, belong to the International Understanding Department of Bunkyo University. The learners in this class, who major in International Studies, are also highly motivated to use English for their studies or for communicating with others in English, as one of the communication tools inside and outside of the classroom. A regular class consists of approximately 27 students and runs for 90 minutes once a week. The compulsory English courses are divided into six levels; depending on the students’ score on the CASEC test taken twice a year to find the achievement of their English ability. This present study was conducted with intermediate level students, whose average CASEC score was about 503 for each class. The input only group consisted of 23 students, whose average was 491.2 out of 1000 points. The input-output-input group consisted of 22 students, whose average was 507.4. A score of 500 points in CASEC was equivalent to 405 points in TOEIC.

The total number of the participants in this study was 46 students. The participants were divided into two groups; an input-only and an input-output-input group. However, there were slight differences in the average scores on the CASEC test for each group. The score gap was slightly seen at about 16.2 points for the CASEC test between the experimental group and the comparison group. In order to make an equal testing environment, 10 students from each group were chosen randomly for the data analysis. Therefore, the average score for each group was nearly the same on the CASEC test. The comparison group, the input-only group (3 males, 7 females), was 503.4 out of 1000 points and the experimental group, the input-output-input group ( 2 males, 8 females), was 502.6 points.

### 3.3. Procedure

In this present study, the written recall task, which was a type of text reconstruction task, was conducted in both groups. All participants were required to do written recall tasks with listening to the

passage from the ALC NET WORK ACADEMY, Unit 8, “ Cram school in the USA.” (Appendix 1). The participants recalled the passage in writing. Table 1 illustrates the different stages of the experimental procedure.

The participants completed a multi-stage written recall task, as follows with using the ALC NET WORK ACADEMY in CALL.

(1) The participants listened to a written dialogue passage in the ALC NET WORK ACADEMY in CALL.

(2) Secondly, both groups moved on to the vocabulary practice part in the ALC NET WORK ACADEMY. It had 10 words and they clicked on the bottom to choose the right meaning in Japanese in the CALL system to check their understanding of the vocabulary in the passage.

(3) Next, the participants listened to the passage again This time, the participants were allowed to take notes while listening. The input-only group listened twice. On the other hand, the input-output-input group listened to it only once with note taking.

Table 1. Sequence of activities in the experimental design

Input-Only Group ( <i>N</i> =10)	Input-Output-Input Group ( <i>N</i> =10)
(1) Listening to the passage once	(1) Listening to the passage once
(2) Vocabulary practice in ALC	(2) Vocabulary practice in ALC
(3) Listening to the passage again (twice)	(3) Listening to the passage again (once)
(4) Written recall task	(4) Written recall task 1
	(5) Listening to the passage again (once) Written recall task 2

(4) Then, the input-only group reconstructed the passage in a written recall task after having listened to the passage twice. On the other hand, the input-output-input group reconstructed the passage after having listened only once.

(5) For the second listening, the input-output-input group was told to pay attention to their first writing recall protocols and correct their writing, or add more information. For this the participants rewrote and added sentences with noticing, and completed the recall tasks.

This study was examined to see the influence of the learners' output noticing development between the input-only group and the input-output-input one. The learners in the input-output-input group had an opportunity to correct their first writing with noticing their first output writing. The research hypothesis proposed that the input-output-input group was superior to the input-only group since the learners could pay more attention to their production.

#### 4. Data Analysis

The written recall protocols were investigated through counting propositional representations. In other words, the learners reconstructed the passage with their own words, therefore, the propositional representation is a unit of meaning in each written retelling task. In this study, the written recall protocols were counted with the meaning unit, including "subject and verb", "subject verb and noun as an object", or "subject, verb and adjective or adverb" as a propositional representation. The spelling

mistakes and grammatical mistakes such as third-person singular-s, singular or plurals were uncounted in the propositional units. The recall protocols were counted as a meaning unit based on the original passage (Appendix 1). There are 10 sentences to use to rebuild the story. Therefore, a sentence or a unit of meaning was counted as one point for the recall protocols in the data analysis.

#### 5. Results

In order to analyze the effects of noticing in written recall task, the number of the propositional representations in each group was displayed in Table 2 with the mean scores and the SD (standard deviation). In comparing the input-only group and the input-output-input group on the first production, the input-only group ( $M= 3.6$ ,  $SD= 1.1$ ) showed the recall protocols higher than the input-output-input group ( $M= 2.6$ ,  $SD=0.8$ ). This result assumed that the input-only group could listen to the passage twice, while the input-only-input group only once. The mean scores on the 10 sentences or propositional representations displayed that the "input-output-input" group showed higher scores than the input-only group on the second time. The "input-output-input" recall protocols increased after writing recall protocols in both the mean scores and the SD ( $M= 4.5$ ,  $SD = 1.4$ ).

Then, in order to determine whether this increase was significant or not, the scores were analyzed by a paired sampled t-test with a nonparametric Wilcoxon Signed Ranks Test due to the low number of

Table 2 Participants' mean scores on the written recall protocols

Group	<i>N</i>	<i>M</i>	<i>SD</i>
(1) Input-only	10	3.6	1.1
(2) Input-output-input 1st time	10	2.6	0.8
Input-output-input 2nd time	10	4.5	1.4

participants and non-normally distributed data. The t-test revealed that the participants of the input-output-input group produced more recall protocols on the second time than the first time production, ( $t(10) = -4.385$ ,  $p = .002$ ), in addition, the Wilcoxon Signed Ranks Test, ( $z = -2.539$ ,  $p = .011$ ). Both the T-test and the Wilcoxon Signed Ranks Test showed the significant effect in the written recall protocols between the first task and the second one. The results indicated that the learners' noticing added more information in the written recall protocols.

The result showed that the learners' noticing affected the written recall task. On the second time, the learners improved their writing with correcting or adding the information compared to the first production and paid more attentions to the second written recall protocols.

## 6. Conclusion and Further study

This study aimed to investigate the effect of pushed output with the learners' noticing in a written recall task. The learners of the input-output-input group had

a subsequent input after the first writing. On the second listening task, the learners paid more attention to their first writing and reproduced more in the second writing.

The findings of the study can be used to support the two research questions; the first one (Does output in a written recall task affect learners' noticing of English in producing recall protocols?) suggested that the first recall protocols led the participants to notice the lack of information in a written recall task on the second time. In other words, the participants paid attention to the first output production during the second input (listening) task and added more information in their retelling the passage in writing. Then, the second research question (Does an "input-output-input" group write more recall protocols than an "input-only" group?) indicated that the input-output-input group could write more protocols than the input-only group. The results supported some of the previous research related to the input and output tasks. Output did not always show a successive outcome to the target form. The



learners also improved the structure when they received relevant input (Izumi & Bigelow, 2000).

For further study in output production through noticing of EFL learners, more investigations would be necessary to see the interactions between input-output sequences. In current English teaching theories like CLIL, the learners listen to English and reproduce what they learn from input activities as well as the learners listening to opinions or presentations from others. Input-output-input activities are constantly occurring in CLIL classes. In this study, the output productions were counted only as propositional representations. However, for further study, more linguistic features should be investigated such as grammatical outcomes and lexical richness, as well as examining more details of learners' development in learning the target language.

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**Appendix 1. (ALC NET WORK ACADEMY,  
UNIT 008)**

Woman: The “juku” of Japan are called  
“cram schools” in America, aren’t they?

Man: That’s right. They have that name  
because they’re places where students  
cram for exams like SATs.

Woman: Cram schools aren’t really popular  
in the U.S.A., are they?

Man: Actually, they are. There is a Kumon  
school in almost every town in many  
parts of America today. The quality of  
education in many public schools in the  
U.S. isn’t very good. So, parents want  
their children to get a good start in  
subjects like math.

Woman: If you have children, you won’t  
send them to a cram school, will you?

Man: I would. If we want our kids to  
compete for future jobs, we had better  
give them every chance we can, hadn’t  
we? And cram schools can be a good  
place for children to make new friends,  
too. But I won’t force my children to go  
to a cram school if they don’t want to  
go.

