

Effects of Task Repetition and Self-reflection on EFL Learners' Attentional Allocation and Speaking*

Bongsun Song

(Goyang Dongsan High School)

Song, Bongsun. (2017). Effects of task repetition and self-reflection on EFL learners' attentional allocation and speaking. *English Teaching*, 72(4), 81-103.

This study investigated how Korean EFL learners' attentional allocation changes during task repetition with or without self-reflection and how this change affects their task performance. A total of 30 Korean high school students were divided into a task repetition only group, a task repetition with self-reflection group, and a comparison group. Each group repeated the same picture-based storytelling task according to its group condition and then performed a new task. Participants' task performances were analyzed in terms of fluency, complexity, and accuracy and their retrospective interviews were categorized in order to explore their attentional allocation during task planning and performance. The results demonstrated that the learners placed most attention to conveying the message while planning and performing their first task. However, when repeating the same task, the learners paid more attention to structures and forms leading to improvement in complexity and accuracy. These learners were also more likely to employ strategies they had learned previously when doing a new task, which was helpful. Self-reflection raised learners' awareness on the target form and positively influenced accuracy.

Key words: attentional allocation, task repetition, self-reflection, storytelling task

1. INTRODUCTION

As a way to implement task-based language teaching in second language (L2) classroom, task repetition has drawn the attention of a growing number of researchers. Bygate (2001) argues that the repetition of a task frees up speakers' attention, so that a speaker can pay more attention to linguistic forms during later performances of a task.

* This paper is based on a part of the author's Ph.D. dissertation data.

Thus, it is suggested that repetition of tasks can help learners develop their accuracy and complexity as well as fluency by expanding their attentional capacity (Bygate, 2001; Bygate & Samuda, 2005). In this case, 'task repetition,' defined by Bygate and Samuda (2005), refers to "repetitions of the same or slightly altered tasks—whether whole tasks, or parts of a task" (p. 43). In other words, this concept indicates not repeating the cues verbatim but working or re-working the meanings and formulations toward achieving task goals.

Agreeing with the usefulness of task repetition, up to date, many researchers have studied its effect on learners' performance and have found a positive effect on L2 speech production in terms of fluency, complexity, and/or accuracy (e.g., Ahmadian & Tavakoli, 2010; Bygate, 2001; Finardi, 2008; Lynch & Maclean, 2000). However, regardless of its general benefits, previous studies have showed several limitations. For example, task repetition alone did not improve students' performances in all measures. While it increased complexity, it did not increase accuracy at the same time (Bygate, 2001). Also, the repetition effect was rarely transferred to a new task, which may not show direct proof of learners' L2 acquisition (Gass, Mackey, Alvarez-Torres, & Fernandez-Garcia, 1999). These weak effects indicate that one needs to look at process rather than only performance product as the effect of task repetition. That is, it is necessary to see how learners' attentional allocation affects or is affected by task repetition, which helps to understand how beneficial or limited repeating a task would be in terms of L2 development. Nonetheless, so far, not many studies have conducted this domain. In some research, the relationship between task repetition and speaking anxiety was emphasized (e.g., Kim & Tracy-Ventura, 2013), but such a relationship with cognitive aspects has rarely been investigated.

Given this, the present study mainly explored the change of students' attentional allocations along with task repetition. However, the conditions for task repetition were varied as an attempt to overcome the above-mentioned limitations. This study adopted more frequent and intensive task repetition practice and added an intervention after a task. The participants were recruited from Korean high school students of English as a foreign language (EFL). The enhancement of students' communicative abilities has been emphasized in the National English Curriculum since 1980s (Ministry of Education, 2015) but the teaching method still centers on presenting and delivering knowledge to students. Furthermore, EFL teachers have not yet found good ways to improve students' oral production. Considering this discrepancy between the purported goal of English education and the real teaching practices in the L2 classroom, the findings of this study are expected to narrow this gap by showing alternative ways of teaching English in meaningful contexts. To achieve this goal, the following specific research questions have been adopted:

1. How does task repetition and self-reflection affect Korean high school EFL learners' L2 oral performance?
2. How does task repetition and self-reflection affect learners' attentional allocations?

2. LITERATURE REVIEW

2.1. Effects of Task Repetition

According to Bygate (2001), there are three potential benefits of oral task repetition. First, it may increase a learner's fluency in terms of speed and general smoothness of delivery, given that repetition of the task is likely to make it easier to formulate and articulate language. Second, the speaker might improve in oral accuracy by paying more attention to the precision of the language or by approaching the norms of the target language more closely. Third, the speaker might build on the routines that enable him/her to produce a more complex or more sophisticated formulation of the message. In other words, Bygate insists that repetition of a task may change a learner's performance in terms of fluency, accuracy and/or complexity.

This argument has been explored by empirical studies. One of the early studies regarding task repetition was conducted by Bygate (1996). When Bygate explored two narrations by a single participant with the same content but three days apart, the learner seemed to perform better at the second trial on all measurements, such as grammatical complexity and the lexis.

Other studies have confirmed the positive effect of task repetition as well (e.g., Ahmadian & Tavakoli, 2010; Bygate, 2001; Finardi, 2008; Lynch & Maclean, 2000; Révész & Han, 2006). In a larger-scale study than the first one, Bygate (2001) showed that repeating a narrative task produced gains in the complexity of speech, but not in accuracy. This result was corroborated in Finardi (2008), which used a picture description task for the repetition instead of a narrative task. Lynch and Maclean (2000) also proved the beneficial effect of task repetition by exploring the speech of two learners at markedly different levels of English proficiency. Both learners improved their use of some linguistic forms from mere repeated practice. In a slightly different manner, Révész and Han (2006) examined the impact of task content familiarity combined with task type (i.e., note-primed task vs. video-primed task) on the efficacy of recasts. The results revealed significant main effects for task content familiarity and task type. Participants who received recasts through the task with familiar content and video-primed tasks showed greater accuracy in their oral production of the past progressive.

Ahmadian and Tavakoli (2010) added planning conditions to task repetition in order to find a way to enhance its effect. In previous studies, task repetition saw only a limited increase in performance on all measures. Ahmadian and Tavakoli divided groups by planning (careful online or pressured online planning) and task repetition (with or without task repetition) conditions. The result was that participants who did careful online planning and task repetition significantly enhanced the complexity, accuracy, and fluency of their spoken English.

Although the beneficial effect of task repetition is well known for the same task, its transfer effect to a new task has not yet been much supported. Gass et al. (1999) showed an improvement in learners' overall proficiency and lexical sophistication due to task repetition, but they could not find any carryover effect to a task with different content. Bygate (2001) also examined the transfer effect, along with the effect of task repetition. Participants practiced the same type of task with different content over 10 weeks and performed the exact same task in the first and last weeks of the experiment. The results showed that task repetition significantly increased fluency or complexity in the learners' performances because of contextualized cognitive rehearsal previously conducted but any significant task-type practice effect could not be found. That is, the practice of a certain type of task did not appear to enhance the performance on a new task of the same type. Although Bygate (2001) claims a partial transfer effect in task-type practice, given that the participants who had been exposed to repeated versions of a type of task were significantly more fluent than those who had not been exposed when the test task was repeated, there was little effect on the other measurements. Similar results have occurred from the Korean context, as well. In the research of Song (2016), which investigated the effects of task practice and task type (i.e., narrative vs. description) on Korean high school students' L2 oral performance, it was found that their performance was significantly affected by the task type, but did not improve with task practice for both types of tasks.

The above literature shows that task repetition clearly has beneficial effects on L2 speech production, but it alone has limitations in demonstrating a positive effect on learners' L2 acquisition. Therefore, some studies have tried other methods of task repetition. For example, post-task intervention was provided to learners. In the following, the studies related to this trial are reviewed.

2.2. Task Repetition with Post-task Intervention

Several post-task interventions were administered after a task to improve learners' accuracy, as well as fluency and complexity. Sheppard (2006) gave input or repair between a first and second performance to two experimental groups and compared them with a repetition-only group. He found that the group receiving repair improved most in accuracy,

fluency, and complexity. More importantly, only the groups that received intervention, whether input or repair, were found to demonstrate the transfer effect for grammatical complexity. More recently, Baleghizadeh and Derakhshesh (2012) examined the effect of task repetition, along with a reactive focus on form regarding learners' output. In their research, participants were given corrective feedback after their first oral performance; as a result, they showed more accurate oral presentation in their second performance. In Hawkes' (2012) study, the teacher gave explicit form-focused instructions to the students after the first main task. When performing the same task again, the participants appeared to turn their attention more toward the form, which led to more improvement in their accuracy during the second performance.

The above demonstrates the positive effect of post-task intervention on increasing the accuracy of learners' performance by drawing their attention to the form. However, the treatments were all given by the teacher. Lyster (2004) argues that learners' self-correction via prompts or teachers' elicitation of learners' self-correction via prompts is more effective and more motivating than teacher-initiated corrections. Only when the learners fail to correct themselves should the teacher correct the errors. Shehadeh (2001) also explored the roles of self- and other-initiated modified output during task-based interaction. He found that instances of modified output resulting from self-initiations were significantly greater than those resulting from other-initiations. Based on this result, Shehadeh suggests that self-initiations, as well as other-initiations, play an important role in prompting modified output.

Considering the important role of modified output in L2 learning, in terms of providing learners with opportunities for the proceduralization of target language knowledge and for reanalyzing and modifying their non-target output, the findings from these studies indicate that a learner-initiated focus on form should be taken into consideration as one of the important elements for L2 learning. Moreover, learners should be given time and opportunities to initiate and repair their own errors. Given this, this study includes self-initiated error correction for post-task intervention and sees its effect on students' performance.

2.3. Cognitive Factors in Task Repetition

Recently, researchers contend that documenting what learners really plan or focus on for a task is more important than the effects of other factors on L2 performance, given that the learner's choice of what to attend to would affect the performance (Wang & Lee, 2014).

Wendel (1997) explored Japanese intermediate EFL learners' planning processes using post-task interviews. The results revealed that learners spent most of their pre-planning time organizing the task and finding the right vocabulary. Sangarun (2005) also reported

that regardless of types of instruction (i.e. focus on content, form, and content/form), her learners predominantly planned meaning than form. In the Korean context, Park's (2009, 2010) studies showed the similar results that her intermediate college students prioritized their attention to the content/vocabulary and organization of the story, despite the pre-task instructions and planning conditions. Wang and Lee's (2014) advanced EFL learners also placed most their attentions on the conceptualization of ideas during pre-task planning and on the fluency of speech while performing a task.

In sum, the above studies have shown that L2 learners, when given time to plan or perform a task, tend to pay most attention to arranging the ideas they will carry over rather than formulating linguistic forms (Ellis, 2005). However, there is a possibility that repeating task performance may influence learners' attention to meaning/form during the main task because the repetition reduces the cognitive demand of a task, enabling the learners to concentrate on what they did not attend previously. For example, Bygate and Samuda (2005) explored the changes in the quality of participants' speech from their data of task repetition. They focused on differences in the elaboration of the basic information content between Time 1 and Time 2 and found that the change in the Time 2 performance was not a matter of changes in the available language resources, but rather changes in attention. They claim that while the participants were more likely to focus on recovering content from memory and putting it into comprehensible shape at Time 1, they seemed to give more attention to the coherence of the story itself at Time 2.

The above research shows the change of learners' attentional allotment while repeating a task, but such studies which revealed the effect of task repetition on learners' processing are very sparse. In particular, considering the importance of focus on form in L2 acquisition (Park, 2010), investigating the attentional shift from meaning to form or to other performance aspects may shed light on the literature related to second language acquisition.

3. METHODOLOGY

3.1. Participants

This study had 30 Korean EFL high school students, aged 16 or 17 (11th graders). All participants belonged to the middle or above-middle levels of proficiency groups, based on the scores they received from the general English exam administered by the Gyeonggi Province Office of Education a year before this study. The exam consisted of almost all modalities of English, such as listening, reading comprehension, grammar, and vocabulary items; thus, this exam was considered to estimate students' general English proficiency

more correctly than the in-house school exam. Since students had never taken any official English speaking test, participants were placed into each group based on their general proficiency.

All participants attended the same public high school located in the northern part of Gyeonggi Province, Korea, and they had studied English for a minimum of nine years in a formal educational setting. They had rarely practiced English speaking, either in or out of the school and mainly studied reading comprehension and grammar for the College Scholastic Ability Test. However, their interest in English speaking was very high. The mean scores for their desire to speak English better was 4.68 out of 5.00, measured by a 5-point Likert scale in the questionnaire.

3.2. Research Design

Figure 1 presents the overall design of this study to investigate the effects of task repetition and self-reflection on learners' attentional allocations and performance.

FIGURE 1
Design of the Study

Trial	Task repetition with self-reflection group (RS) (n = 10)	Task repetition only group (RO) (n = 10)	Comparison group (CG) (n = 10)
T1	Story 1	Story 1	Story 1
	↓ Self-reflection		
	↓ Interview	↓ Interview	↓ Interview
T2 (repetition)	Story 1	Story 1	
	↓ Self-reflection		X
	↓ Interview	↓ Interview	
T3 (repetition)	Story 1	Story 1	
	↓ Self-reflection		X
	↓ Interview	↓ Interview	
T4 (repetition + transfer)	Story 1	Story 1	Story 1
	↓ Interview	↓ Interview	↓ Interview
	Story 2	Story 2	Story 2
	↓ Interview	↓ Interview	↓ Interview
	↓ Questionnaire	↓ Questionnaire	↓ Questionnaire

Two repetition groups performed the same task (Story 1) four times but the comparison group did it only twice in the first and fourth weeks to ensure that any improvements measured were not due to other factors than frequent task repetition. Three groups also performed a new task (Story 2) right after the fourth trial of Story 1. To explore the effect of post-task intervention, self-reflection on the use of past-tense verbs was chosen for this study because learner-initiated self-reflection is supposedly related to learner-centeredness or learner autonomy (Little, 2009). EFL learners might run into difficulties while studying but their teachers might not be around them whenever needed. For this, learners need to have more autonomy in their learning, including error correction.

Given this, each group condition was determined. The first group, referred to as the task repetition with self-reflection group (RS), performed the same storytelling task four times at one-week intervals and told a new story once in the fourth week. Right after each task, during the first three weeks, the participants heard the recorded audio-files by themselves without stopping and self-reflected their storytelling. There were no interruptions or corrections from the teacher and students were not allowed to ask any questions to the teacher while listening. The second group, the task repetition only group (RO), only performed the same task four times once a week and a new task once in the last week without any post-task intervention. The third group, the comparison group (CG), performed the same task only twice during the first and the fourth weeks, and did a new task once in week four.

The learners in all groups performed tasks individually with the researcher. They received the same direction on how to do the task before each task, "*Make one story by weaving pictures and tell it in English. Pretend that you are storytelling a fairy tale to a child.*" All participants had 10 minutes' planning time and 15 minutes' performance time for each task. During the planning time, students were not allowed to use the dictionary or to ask any questions to the researcher. Right after planning, students narrated the stories. The researcher recorded their speaking and checked the time. Once each student finished the task, the recorded audio file was played only for RS group and the students reflected what they had said by themselves. They were instructed to focus on past-tense verbs while listening ("*Now, listen to what you told. Focus on whether you used past-tense verbs correctly.*"). It was assumed that past-tense verbs would be more natural to the tasks because students were asked to make a story with pictures rather than just describing them and that they are relatively hard for L2 learners to use correctly in speaking. In the fourth week, the participants in all groups performed a new task after finishing the first story. The second story (S2) was performed in the same way as the first story (S1) was.

Retrospective interviews were conducted right after each task in all groups. The interviews were done in order to explore the attentional allocations while doing the same task repeatedly, based on the idea that learners' attentions would change by the influence

of task repetition, and in turn, would affect learners' performance as well. Interviews were implemented in Korean with all students individually. Participants were asked as to what they had planned during planning time and which aspects they had mainly focused on while speaking. In addition, students were encouraged to express anything they noticed or realized while repeating the task. All interviews were audio-recorded for later analysis. When finishing the last interview, a questionnaire was administered as a last step to obtain participants' overall perception of task repetition and their general information, such as their age, English learning and speaking experience, preference for English, and desire for English speaking.

3.3. Task

Target tasks were storytelling. Two tasks were used, one for a repetition task and the other for a new task. Both tasks were conducted with two kinds of fairytales written for EFL kindergarteners, each of which had 46 pages. The tasks were chosen on the assumption that they could provide learners with meaningful practice by requiring to describe and connect pictures in order to make a story. Furthermore, the relatively long length of a story was expected to prevent learners from repeating the same language mechanically in subsequent performances.

The fairytales were chosen through the pilot test: 'Hansel and Gretel' for a repeated task and 'Snow White' for a new task. These two stories were familiar to all participants but telling them in English was a new experience to them. Thus, the familiarity of stories was expected to reduce their cognitive load to understand pictures and make a story in English. The two stories were considered to be comparable in terms of the story plot, vocabulary, and sentence structures required describing pictures.

All English words in the books, including the title, were removed so that students could not see any words while their storytelling. However, the order of the pictures was fixed. Participants did not have to put the pictures in order, but instead, they had to construct the story with their imagination. They were welcomed to describe pictures in their own ways.

3.4. Data Analyses

Each trial of a task produced 30 speaking samples and 30 retrospective interview recordings but for this study, only those from the three trials (the first trial of S1, the last trial of S1, and the trial of S2) were included to see the effects of task repetition and self-reflection. Thus, in total, 90 speech samples and 90 interview recordings were used. The data were transcribed and analyzed in two ways: quantitative analysis with speech samples

and qualitative analyses with interview recordings. Task performance data were analyzed in terms of fluency, complexity, and accuracy, as presented in Table 1.

TABLE 1
Measures for Task Performance

Aspect	Measure	Calculation
Fluency	Unpruned speech rate per minute (UnPSR)	Total number of syllables/Total seconds of speech × 60
	Pruned speech rate per minute (PSR)	Total number of syllables excluding filled pauses, reformulations, false starts and repetitions/Total seconds of speech × 60
	Number of pauses per AS-unit (Pau/AS)	Total number of pauses/Total number of AS-units
Complexity	Guiraud Index (GI)	Types of words/Square root of tokens of words
	Number of subordination per AS-unit (Sub/AS)	Total number of subordinate clauses/Total number of AS-units
Accuracy	Error-free clauses per AS-unit (EF/AS)	Total number of error-free clauses/Total number of AS-units
	Error-free past tense clauses per AS-unit (PTEF/AS)	Total number of error-free past tense clauses/Total number of AS-units

Fluency was measured by the unpruned speech rate per minute, the pruned speech rate per minute, and the number of pauses per AS-unit. For the pauses, only filled and unfilled pauses beyond 1 second were included in this study considering little English speaking experience of the participants. An Analysis of Speech (AS) unit was counted, by the definition “a single speaker’s utterance consisting of an independent clause or sub-clausal unit, together with any subordinate clause(s) associated with it” (Foster, Tonkyn & Wigglesworth, 2000, p. 357). Complexity was measured in two ways: lexical complexity and syntactic complexity. Lexical complexity was measured by the Guiraud Index to take into account the length of production (Ong & Zhang, 2010). Lastly, the proportion of error-free clauses and the proportion of error-free past tense clauses were counted to measure accuracy. An error-free past tense clause indicates a clause showing the correct use of the past tense, although there could be some other grammatical error or awkward part within the same clause. To check the inter-rater reliability, 10% of the speech samples were analyzed by a second rater, who had MA degree in English Education. The two raters showed 90% of agreement.

The 90 retrospective interviews were analyzed in four steps. Previously, Wang and Lee (2014) analyzed interview data to investigate the relationship between learners’ attentional allocation and strategy use and task performance. First, they were classified into two groups according to whether they made any remarks on planning strategy or speaking focus. After that, the data were coded by the process normally taken for analyzing

qualitative data to create the category codes (Merriam, 2009). All relevant information to each group was noted in the margins while reading down through the transcript, which is referred to as *open coding*. Then, the open codes were grouped by reading all notes several times to construct the categories, which is referred to as *analytical coding*. For example, comments from the students such as “understanding the pictures,” “thinking of the storyline,” and “figuring out how to say” were combined into the category of “conceptualization of ideas” as one of the planning strategies. This process continued until all open codes were covered. When all the categories were set up, they were sorted out into three aspects of fluency, complexity, and accuracy. After the list of categories was finalized, the number of remarks related to any of them was counted.

For the reliability of the analysis, the two raters coded 10% of the interview data independently. The analysis focused on the frequency as well as the existence of the remarks of concern in each interview. They showed 90% of agreement in identifying remarks on each category in their first analyses. For the parts where the raters disagreed, they discussed it and reached 100% agreement in the end. After resolving the discrepancy, the remaining data were coded by the researcher. The finalized categories are shown in Table 2.

TABLE 2
Categories for Planning Strategies and Speaking Focus

Aspect	Planning Strategies	Speaking Focus
Fluency	Conceptualization of ideas	Describing pictures Skipping difficult parts More detailed descriptions (Initial) search for words Reuse of words/phrases Faster speed of speaking
	Reconceptualization of ideas	
	Search for words/phrases	
	Search for words for skipped parts	
	Mental translation	
	Skipping (difficult) parts (Mental) rehearsal	
Complexity	Diversification of words/phrases	Simple words/structures
		Lexical variation
		Complex sentences
		Story organization
Accuracy	Past tense Word order/grammar	Present tense
		Past tense
		Plural form
		Word order/grammar

4. RESULTS AND DISCUSSION

This part presents the effects of task repetition and self-reflection on the task performance and attentional allocation in terms of fluency, complexity, and accuracy. To

put observed changes across repeated trials into perspective, the first trial of S1 (S1-T1) is compared with the fourth trial of S1 (S1-T4) and with the performance of S2.

4.1. Each Group's Task Performance

Table 4 shows each group's mean scores for fluency. It reveals that all groups generally showed poor performance in their first trial of storytelling but improved in the fourth week.

TABLE 3
Group Tendency for Fluency ($N = 30$)

		Unpruned Speech/minute			Pruned Speech/minute			Pauses/AS-unit		
		S1-T1	S1-T4	S2	S1-T1	S1-T4	S2	S1-T1	S1-T4	S2
RS	<i>M</i>	57.67	78.85*	73.48*	46.05	69.30*	62.90*	2.72	2.39	3.13
	<i>SD</i>	16.95	19.88	15.86	14.80	17.61	13.46	.61	.79	1.03
R	<i>M</i>	50.03	73.19*	67.86*	44.03	66.01*	60.78*	2.53	2.53	5.56*
O	<i>SD</i>	30.24	32.21	26.93	25.82	27.00	21.66	.86	.85	3.67
C	<i>M</i>	47.70	56.75*	58.65*	38.69	47.87*	49.48*	3.06	3.06	3.47
G	<i>SD</i>	11.41	12.85	11.71	10.15	10.74	9.30	.84	.50	.53

Note. RS = Task repetition with self-reflection group; RO = Task repetition only group; CG = Comparison group; S1-T1 = Story 1-Trial 1; S1-T4 = Story 1-Trial 4; S2 = Story 2; * $p < .05$

The average speech rates of two repetition groups (RS and RO) greatly increased in their last storytelling of S1, in the measures of both unpruned (78.85 for RS and 73.19 for RO) and pruned speech rates (69.30 for RS and 66.01 for RO). After that, their speaking speed slightly decreased in a new storytelling (73.48 at unpruned speech rate and 62.90 at pruned speech rate for RS, 67.86 and 60.78 for RO) but remained much higher than those of their first storytelling. The results of Wilcoxon tests proved that these increases were statistically significant at the level of $p < .05$. The comparison group also greatly improved their speed of speaking in the fourth week (56.75 for S1 and 58.65 for S2 at unpruned speech rate and 47.87 for S1 and 49.48 for S2 at pruned speech rate). Regarding the number of pauses per AS-unit, all three groups did not much reduce it along with task repetition. In the last trial of S1, only the number of pauses from RS group decreased from 2.72 to 2.39 but it was not significant. In a new task performance, the participants tended to stop speaking most frequently in all groups and surprisingly, RO group's number of pauses rapidly increased.

As far as complexity, the groups showed different pattern from that of fluency. As Table 4 presents, structural complexity continued to increase in all groups from the first storytelling to the fourth speaking and to a new task performance. According to Wilcoxon tests, only the improvement of RS group from S1-T1 to S1-T4 was significant but in a new task, all groups increased their means significantly at the 95% confidence level.

TABLE 4
Group Tendency for Complexity (N = 30)

		Subordination/AS-unit			Guiraud Index		
		S1-T1	S1-T4	S2	S1-T1	S1-T4	S2
RS	<i>M</i>	.12	.22*	.24*	6.47	6.86	6.18
	<i>SD</i>	.10	.08	.12	1.17	.75	.82
RO	<i>M</i>	.15	.22	.28*	6.21	6.88*	5.83
	<i>SD</i>	.12	.10	.11	0.98	.63	.67
CG	<i>M</i>	.14	.15	.27*	6.11	6.12	5.00
	<i>SD</i>	.04	.06	.08	.68	.59	.72

Note. * $p < .05$

On the other hand, lexical complexity reached its peak in the repeated task but touched the lowest scores in a new task. What is interesting is that RS group and RO group showed opposite patterns in S1-T4. While RS group increased mean scores significantly in syntactic complexity but not in lexical complexity, RO group improved greatly in lexical complexity but not syntactic complexity.

Lastly, Table 5 presents the result for accuracy. All groups' performances were similarly poor in their first storytelling but changed differently according to the group condition as the task was repeated.

TABLE 5
Group Tendency for Accuracy (N = 30)

		Error-free clauses/AS-unit			Past tense-error-free clauses/AS-unit		
		S1-T1	S1-T4	S2	S1-T1	S1-T4	S2
RS	<i>M</i>	.18	.54*	.51*	.24	.42*	.42*
	<i>SD</i>	.16	.18	.12	.13	.12	.17
RO	<i>M</i>	.25	.46*	.39	.22	.25	.41*
	<i>SD</i>	.15	.24	.20	.10	.12	.15
CG	<i>M</i>	.26	.32	.39	.28	.28	.27
	<i>SD</i>	.14	.22	.24	.16	.16	.16

Note. * $p < .05$

Regarding the number of error-free clauses per AS-unit, the mean scores of two repetition groups improved much greater in the same repeated task but only RS group showed significant improvement in a new task at Wilcoxon test. When it comes to the past-tense-related accuracy, most students of RS group highly raised their accuracy in the fourth trial of S1 ($M = .24$ to $M = .42$) and sustained their improvement in S2 performance as well

($M = .42$). RO group participants, on the other hand, hardly increased their past-tense accuracy in S1-T4 ($M = .22$ to $M = .25$) but improved in S2 performance ($M = .41$). CG participants did not much enhance their accuracy in both measures across all task trials.

Overall, in comparison to CG which showed its improvements mainly in speech rates, two repetition groups developed their performances in more various aspects for both the same task and a new task, indicating the positive effect of task repetition. However, when comparing two repetition groups, RS group proved more distinctive and stable development in syntactic complexity and accuracy measures for S1-T4 and S2. RO group also showed improvement in complexity and accuracy but it was for S1-T4 or S2, not for both tasks. This result might reveal the limitation of repetition-only practice and the benefit of self-reflection along with task repetition. Notable is that self-reflection on a specific linguistic form helped increasing general accuracy as well as task-specific accuracy for the same task and a new task. In contrast, with regard to the number of pauses and lexical complexity, the three groups showed relatively less improvement for the same task and even deteriorated performances for a new task. This probably indicates the limited effect of self-reflection provided in this study.

4.2. Relationship Between Students' Attentional Allocation and Task Performance

4.2.1. Attentional allocation and fluency

Table 6 presents planning strategies related to fluency which three groups used for each performance.

TABLE 6
Planning Strategies Related to Fluency

	RS			RO			CG		
	S1 T1	S1 T4	S2	S1 T1	S1 T4	S2	S1 T1	S1 T4	S2
A	7	0	1	8	0	2	8	2	1
B	0	0	0	0	5	1	0	0	0
C	4	1	1	8	0	0	6	1	2
D	0	3	0	0	4	0	0	2	0
E	1	1	0	0	0	0	0	1	0
F	1	0	0	0	0	0	0	0	0
G	1	3	2	0	4	3	0	2	1

Note. A = Conceptualization of ideas, B = Reconceptualization of ideas, C = Searching for words/phrases, D = Searching for words for skipped parts, E = Mental translation, F = Skipping (difficult) parts, G = (Mental) rehearsal

The above Table 7 shows that many participants in this study spent most of planning time on conceptualizing ideas (7 students from RS, 8 from RO and 8 from CG) and searching for words (4 from RS, 8 from RO and 6 from CG) to prepare contents to tell for the first storytelling of S1. RO6 explicitly mentioned this point in the interview, as illustrated in (1).

- (1) *I read the whole story first to figure out what it is about and then read it over to find the proper English words. While thinking about English sentences, I recognized that words should be first found.* (RO6)

This tendency was similar to many related previous studies (e.g., Park, 2009; Wang & Lee, 2014; Wendel, 1997). Park (2010) explains that one of possible reasons for the learners' greater attention to meaning than to forms may be related to task type. The current study employed a picture-based storytelling task, which has meaning-oriented nature.

However, many students confessed that they had difficulty in conceptualizing the message due to their poor word ability or no English speaking experience. Thus, RS8 said that during pre-planning, she had even tried to translate the story into English after making a story in Korean first. Due to this difficulty, some students (8 students from RS, 1 from RO and 2 from CG) had skipped difficult parts to speak while performing, as shown in Table 7. This task difficulty resulted in slow speech rates and frequent pauses in all groups.

TABLE 7
Speaking Focus Related to Fluency

	RS			RO			CG		
	S1 T1	S1 T4	S2	S1 T1	S1 T4	S2	S1 T1	S1 T4	S2
a	1	0	0	2	0	1	0	1	1
b	8	0	1	1	1	1	2	1	0
c	0	6	2	0	4	0	0	1	1
d	0	0	3	2	0	5	2	0	3
e	0	0	6	0	1	8	0	2	5
f	0	0	0	0	1	0	0	0	0

Note. a = Describing pictures, b = Skipping difficult parts, c = More detailed descriptions, d = (Initial) search for words, e = Reuse of words/phrases, f = Faster speech of speaking

For the last trial of S1 on the fourth week, participants now became more familiar with the story, and thus some students, mostly from repetition groups, focused on reconceptualizing the ideas (5 from RO) or tried a mental rehearsal (3 from RS and 4 from

RO) while pre-task planning (Table 7). There were still some participants (3 from RS and 4 from RO) who had searched for words but it was for the parts that they had skipped previously. For speaking focus, many students (6 from RS and 4 from RO) tended to concentrate on more detailed description of pictures (Table 8). These efforts produced more speech syllables within the time limit and led to considerably high speech rates in S1-T4 from two repetition groups. However, these attentional changes also caused frequent speech stops and this is why the number of pauses in S1-T4 did not decrease. The planning strategies of comparison group for S1-T4 were generally similar to other groups' but unlike repetition groups, there were a few students who prepared a message newly as if they had met a story for the first time. CG1 and CG10 said that they had to conceptualize the ideas again because what they had done before was almost forgotten. Despite that, the previous experience had a significant influence on increasing their speech rates, as shown in Bygate (2001) where the performance of the exact same task 10 weeks before significantly increased participants' fluency in their second performance.

The participants' cognitive processes were adjusted again when pre-planning a new task. Some students focused on conceptualizing ideas (1 from RS, 2 from RO and 1 from CG) or searching for words (1 from RS and 2 from CS), as they had done for S1-T1. However, this time more learners used rehearsal (2 from RS, 3 from RO and 1 from CG) as their main planning strategy. According to RO2, his previous experience of storytelling taught him that conceptualization of ideas was not enough to recall what he had planned. Thus, he started to rehearse sentences before the task, as mentioned in (2).

- (2) *Before, I just thought about the ideas I would speak but I always forgot about them when performing. This time, I practiced all sentences verbally and I found that I could remember more. (RO2)*

The participants' speaking focus experienced change as well for S2. The efforts to search for words (3 from RS, 5 from RO and 3 from CG) were also made, but this time many students (6 from RS, 8 from RO and 5 from CG) tried to reuse the words or phrases that they had developed during the previous tasks. RO1 commented that he could have reused words for S2 because S1 and S2 belonged to the same genre. For example, RO4 started S1-T4, "A long time ago there was a poor family.... But they were really happy..." and began S2 similarly, "A long time ago, there was a really pretty princess... She was really happy..." This tendency, along with the changed planning strategies, probably contributed to speeding up the speaking rates of many participants even for a new task. However, still the search for words was a big burden to many students and made them stop speaking more frequently for S2, compared to for S1-T4.

4.2.2. Attentional allocation and complexity

Table 8 and Table 9 present planning strategies and speaking focus, respectively, in relation to complexity. They show that participants rarely planned for complexity but attended to structures and vocabulary to some extent while speaking.

TABLE 8
Planning Strategies related to Complexity

	RS			RO			CG		
	S1 T1	S1 T4	S2	S1 T1	S1 T4	S2	S1 T1	S1 T4	S2
H	0	1	0	0	2	0	0	0	0

Note. H = Diversification of words/phrases

TABLE 9
Speaking Focus related to Complexity

	RS			RO			CG		
	S1 T1	S1 T4	S2	S1 T1	S1 T4	S2	S1 T1	S1 T4	S2
g	3	1	1	2	0	2	6	0	1
h	0	5	2	2	3	0	1	4	0
i	0	2	4	1	1	1	0	0	0
j	0	0	5	1	0	0	2	0	0

Note. g = Simple words/structure, h = Lexical variation, I = Complex sentences, j = Story organization

As shown in Table 9, during S1-T1, many students (3 from RS, 2 from RO and 6 from CG) focused on using simple words and structures, which might have been responsible for the low scores on the complexity measures. However, when performing S1-T4, more learners came to focus on lexical variation (5 from RS, 3 from RO, and 4 from CG) and complex sentence structures (2 from RS and 1 from RO). RS1 expressed this change and was satisfied with the use of more various words for S1-T4, as seen in (3).

- (3) ... *When doing the task for the first time, I had kept saying "What's this in English? What's this in English?" I had been embarrassed that English words had not come up for the Korean words. This time, I felt less anxious and I used more various words for characters' emotions instead of 'happy', 'sad'. (RS1)*

This change supports Bygate's (2001) argument that task repetition expands learners' attentional capacity enough to manipulate various aspects of language for the later performance of a task. Furthermore, in this study, more attention to complex structures and lexical variation might have been closely connected to learners' efforts to describe the

pictures in more detail, resulting in increased scores on the complexity measures, in particular, in two repetition groups.

When performing S2, the participants did not pay much attention to lexical variation (only 2 from RS) again, probably due to the burden of finding words. Instead, more students (1 from RS, 2 from RO, and 1 from CG) focused on using simple and easy words, resulting in a decreased lexical complexity in all groups. In connection with syntactic complexity, most comments emerged from RS group; 4 students mentioned complex sentences and 5 commented story organization. RS2 said that he learned to use relative clauses while practicing the same tasks and tried to reuse them for a new task. For example, RS2 who had never used relative pronouns for S1-T1 said for S1-T4, “...*they pick up the stones which is shiny... the breadscrums which they put down...*” and for S2, “... *the king brought a new queen who is interested in ... a big mirror which said...*” These speaking foci at least could explain why RS participants’ syntactic complexity continued to increase in S2 performance, unlike lexical complexity. However, considering the significant improvements of syntactic complexity for S2 in all groups, many participants seemed to care for structures while performing S2 although they did not mention it much in the interviews.

4.2.3. Attentional allocation and accuracy

Similarly to complexity, not many planning strategies were mentioned in relation to accuracy (Table 10) but several speaking foci were remarked (Table 11).

TABLE 10
Planning Strategies related to Accuracy

	RS			RO			CG		
	S1 T1	S1 T4	S2	S1 T1	S1 T4	S2	S1 T1	S1 T4	S2
I	0	1	0	0	0	0	0	0	0
J	1	1	1	1	0	0	1	0	0

Note. I = Past tense, J = Word order/grammar

TABLE 11
Speaking Focus related to Accuracy

	RS			RO			CG		
	S1 T1	S1 T4	S2	S1 T1	S1 T4	S2	S1 T1	S1 T4	S2
k	0	1	0	0	0	0	0	0	0
l	0	2	2	0	0	0	0	0	0
m	0	0	0	0	0	0	0	0	0
n	0	0	1	2	4	0	3	0	0

Note. k = Present tense, l = Past tense, m = Plural form, n = Word order/grammar

As far as past tense, understandably all statements emerged from RS group participants. RS8 stated her planning time spent for past tense when planning for S1-T4, as presented in (4).

(4) *I spent most of planning time in thinking of grammars. ... Not all [grammars]. I mostly thought about past tense. (RS8)*

The attention to past tense was also paid by a few RS group students while speaking. They agreed that they could have focused on past tense for S1-T4 or S2 due to their previous practice. For example, RS4 said that she came to care for not only words and sentences but also past tense during S1-T4, as shown in (5).

(5) *I added one or two more words as I went on. I told more sentences. And I cared more for past tense this time. I surely tried to attend it. But it seemed wrong a little bit. (RS4)*

Regarding other aspects of accuracy, some students from RO mentioned word order/ grammar points for S1-T4, leading to the significant improvement of RO group in general accuracy measure.

In relation to this increased concern for past tense or grammar points, Révész (2005) explains that the repetition of tasks with the same content leads to increased focus on the form, as less attention needs to be devoted to meaning. In this study, the repeated storytelling experiences might have given participants in two repetition groups spare cognitive rooms to pay attention to other aspects more than delivery of a message. In addition, self-reflection on past tense might lead participants in RS group to make more conscious efforts to use past tense correctly. This resulted in RS group's better performance in this measure for the repeated same task and a new task.

This beneficial effect of intervention in the present research corroborates the results of previous studies that employed interventions along with task repetition. Previously, interventions combined with task repetition attracted participants' attention toward the form(s) of interest, thus leading to an increase in the accuracy of their subsequent performances. For example, the participants in Baleghizadeh and Derakhshesh (2012) showed more accurate use of language in their second oral performances. In addition, Hawkes (2012) and Révész and Han (2006) found that intervention had a positive effect on developing specific linguistic targets, such as the past progressive form (Révész & Han, 2006), and the future form and the comparative form (Hawkes, 2012), when combined with task repetition.

5. CONCLUSION

This study set out to explore whether task repetition and self-reflection have individual and combined effects on the change of attentional allocations and how these changes are related to actual task performance. First of all, the results of the final same task performance showed that task repetition had a great influence on speech rates in all groups and complexity and/or accuracy in two repetition groups. The analysis of retrospective interviews explained that the repetition of the same task freed up learners' attention by reducing learners' cognitive load for conceptualizing ideas and searching for new words. This enabled students to focus more on structures and grammar points for a later performance and to attempt to describe pictures in more detail. The efforts for more detailed description improved all learners' speech rates by increasing the number of speaking words although augmenting their number of pauses as well. Self-reflection also helped attract participants' attention toward past tense in RS group.

However, in terms of lexical complexity of the repeated task, the relationship between the participants' attention and their actual performance was not well established. Although many students from all groups reported their conscious attempts to produce lexical variation while speaking, their intentional efforts did not lead to the corresponding improvement except for RO group. For this, other types of intervention might be considered for a future study.

In relation to the results of a new task, all groups significantly increased their speech rates and structural complexity. Many participants mentioned that they reused words and structures which they had learned previously through repeating the same task. This shows the transfer effect of task repetition practice to a new task. The genre similarity might have helped lower learners' cognitive demand for a new task and helped a better performance.

The findings of this study suggest some pedagogical implications when teachers use tasks in the L2 classroom. To begin with, L2 teachers can use a storybook for repetition practice. Normally, simple tasks or mechanical drills are considered more beneficial to the non-advanced level of L2 learners who have limited capacity for words and structures. However, this study revealed that repeating the same story several times resulted in improvement of the students' performances in various aspects. Thus, it is recommended that instead of using several different simple tasks, teachers use a storytelling task repeatedly.

This study also implies that an intervention might help non-advanced learners perform a speaking task. Intervention, combined with task repetition, can lead to enhancing the performance in the related measure. In this study, students in a self-reflection group showed the most correct use of past tense, implying that students' self-reflection could be

one of effective post-task interventions. Thus, teachers need to consider learner-initiated reflection as a method of intervention.

Regardless of the positive findings, however, the current study has several limitations. First, each group in this study contained a limited number of participants. Thus, the findings need to be interpreted carefully in the given context until more studies are conducted with larger populations and various participants. Also, the learners' level of speaking ability was estimated by their general English test scores. Given that their ability of English speaking might not exactly correspond with their general English proficiency, there is the possibility that the participants were not evenly grouped by their speaking levels in each group. In addition, the use of retrospective interviews may have missed unreported but significant cognitive processes during task planning and performance. Furthermore, there might be other factors which affected a better performance of S2 than S1-T1 in some measures, apart from the task repetition of S1. Two stories were chosen through the pilot testing but S1 and S2 may not have been equivalent in many aspects such as the sentence structures and the vocabulary required for storytelling. More evidence must be added in the future to corroborate this transfer effect. Lastly, repeating the same task four times might not be realistic in L2 class because of students' boredom or teachers' tight teaching schedule. Thus, in the future, variations of task repetition should be developed, such as the repetition of a task with different partners or under the different situations, and research on them needs to be conducted to see their effects.

REFERENCES

- Ahmadian, M. J., & Tavakili, M. (2010). The effects of simultaneous use of careful online planning and task repetition on accuracy, fluency, and complexity of EFL learners' oral production. *Language Teaching Research*, 15(1), 35-59.
- Baleghizadeh, S., & Derakhshesh, A. (2012). The effect of task repetition and noticing on EFL learners' oral output. *International Journal of Instruction*, 5(1), 141-152.
- Bygate, M. (1996). Effect of task repetition: Appraising the development of second language learners. In J. Willis & D. Willis (Eds.), *Challenge and change in language teaching* (pp. 123-148). Oxford, UK: Heinemann.
- Bygate, M. (2001). Effects of task repetition on the structure and control of oral language. In Bygate, M., Skehan, P., & Swain, M. (Eds.), *Researching pedagogic tasks: Second language learning and testing* (pp. 23-48). Harlow, UK: Longman.
- Bygate, M., & Samuda, V. (2005). Integrative planning through the use of task-repetition. In R. Ellis (Ed.), *Planning and task performance in a second language* (pp. 37-74). Philadelphia: John Benjamins.

- Ellis, R. (2005). Planning and task-based performance. In E. Rod (Ed.), *Planning and task-performance in a second language* (pp. 3-34). Amsterdam: John Benjamins.
- Finardi, K. (2008). Effect of task repetition on L2 oral performance. *Trab. Ling. Aplic., Campinas*, 47(1), 31-43.
- Foster, P., Tonkyn, A., & Wigglesworth, G. (2000). Measuring spoken language: A unit for all reasons. *Applied linguistics*, 21(3), 354-375.
- Gass, S. M., Mackey, A., Alvarez-Torres, M., & Fernandez-Garcia, M. (1999). The effects of task repetition on linguistic output. *Language Learning*, 49(4), 549-580.
- Hawkes, M. L. (2012). Using task repetition to direct learner attention and focus on form. *ELT Journal*, 66(3), 327-336.
- Kim, Y., & Tracy-Ventura, N. (2013). The role of task repetition in L2 performance development: What needs to be repeated during task-based interaction? *System*, 41, 829-840.
- Little, D. (2009). Language learner autonomy and the European language portfolio: Two L2 English examples. *Language Teaching*, 42(2), 222-233.
- Lynch, T. & Maclean, J. (2000). Exploring the benefits of task repetition and recycling for classroom language learning. *Language Teaching Research*, 4(3), 221-250.
- Lyster, R. (2004). Differential effects of prompts and recasts in form-focused instruction. *Studies in Second Language Acquisition*, 26(3), 399-432.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.
- Ministry of Education. (2015). *The 2015 revised national English curriculum*. Seoul: Ministry of Education.
- Ong, J., & Zhang, L. J. (2010). Effects of task complexity on the fluency and lexical complexity in EFL students' argumentative writing. *Journal of Second Language Writing*, 19, 218-233.
- Park, S. (2009). What do learners do while planning? Learners' use and perceptions of planning for an oral narrative task. *English Language and Literature Teaching*, 15(3), 223-248.
- Park, S. (2010). The influence of pretask instructions and pretask planning on focus on form during Korean EFL task-based interaction. *Language Teaching Research*, 14(1), 9-26.
- Révész, A. (2005). Task-induced content-familiarity, task-driven attention to form, and learner uptake of recasts: A preliminary inquiry. *Teachers College, Columbia University Working Papers in TESOL & Applied Linguistics*, 2(2), 1-21.
- Révész, A., & Han, Z. (2006). Task content familiarity, task type and efficacy of recasts. *Language Awareness*, 15(3), 160-179.

- Sangarun, J. (2005). The effects of focusing on meaning and form in strategic planning. In R. Ellis (Ed.), *Planning and task performance in a second language* (pp. 111-142). Philadelphia, PA: John Benjamins.
- Shehadeh, A. (2001). Self- and other-initiated modified output during task-based interaction. *TESOL Quarterly*, 35(3), 433-457.
- Sheppard, C. (2006). *The effects of instruction directed at the gaps second language learners noticed in their oral production*. (Unpublished Ph.D. thesis). University of Auckland, New Zealand.
- Skehan, P. (2003). Task-based instruction. *Language Teaching*, 36, 1-14.
- Song, B. (2016). *Effects of task repetition and post-task intervention on Korean high school students' English oral performance, cognitive processes and affective domains*. (Unpublished doctoral dissertation). Chung-Ang University, Seoul.
- Wang, Q., & Lee, J.-H. (2014). Korean advanced EFL learners' attentional allocation and strategy use during task planning and performance. *English Language & Literature Teaching*, 20(3), 191-210.
- Wendel, J. (1997). *Planning and second language narrative production*. (Unpublished doctoral dissertation). Temple University, Japan.

Applicable levels: Secondary

Bongsun Song
Goyang Dongsan High School
20 Dongse-ro, Deokyang-gu, Goyang-si
Gyeonggi-do 10597, Korea
Phone: 02-381-0097
Email: sbsjoyful@hanmail.net

Received on September 1, 2017

Reviewed on October 15, 2017

Revised version received on November 15, 2017