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# The Effects of Pre-Task Planning and Proficiency Level on Fluency, Accuracy, and Complexity of EFL Learners' Oral Narrative Task Performance<sup>1</sup>

Yiru<sup>2</sup>Masayuki Kato<sup>3</sup>

## 1. Introduction

When language learners are provided with a same speaking task, not surprisingly, you will find their style of using the target language differs from person to person, even though some conformity may be observed. It seems that everyone has their own style in speaking in the target language. Some people may speak rather fluently. But paying a close attention to their speech, you may find the vocabulary, they use, is usually not that complex, and the grammatical structures are often inclined to be simple. On the contrary, some people may speak slower compared to the fluent speakers above. However, again keeping an eye on their utterances, you may find they have great control over their language, and grammatical errors are rare in their speech. While some people may appear to use 'big' words and often complex sentences, but their language tends to lack accuracy and fluency. It can be surmised from above that there exists a prioritizing strategy which varies among individuals. The fluent speakers above seek optimal results in communication by discounting the grammar to make it easy to handle, which appears to be a strategy of giving priority to fluency at the expense of complexity and perhaps accuracy. In contrast, learners who try to adhere to the target language norms, and learners who tend to use difficult words may prioritize accuracy and complexity over fluency.

Then why do they have this problem? The answer can be sought in the following two models: information processing model for output and dual-mode model (Ellis & Barkhuizen, 2005). According to information processing model, the production of spoken language consists of three major levels of processing: conceptualization, formulation, and articulation. Short-term memory functions as a buffer for these three steps. Learners need to retrieve both their personal knowledge and lexico-grammatical knowledge of the target language stored in their long-term memory and hold these in the short-term memory to construct the language that represents their intention and

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<sup>1</sup> This is an abridged and revised version of the Master's thesis by Yiru presented to the Graduate School of Intercultural Studies, Kobe University in 2015.

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that is grammatically correct and pragmatically appropriate. However, when learners facing with a task, especially an extremely demanding one, for example, the impromptu speech, they choose to set a goal depending on the context and the task requirement by focusing on either the content or the linguistic forms, in order to decrease the burden on their working memory which is of limited capacity. In dual-mode model, L2 linguistic knowledge is divided into exemplar-based and rule-based knowledge. Exemplar-based knowledge consists of formulaic chunks from complete sentences to short phrases. This ready-made linguistic knowledge can be easily accessed to enable speakers to construct their speech when there is little time available for them to plan what to say, which contributes to increased production speed and fluency. Rule-based knowledge involves grammar that can be applied to form a variety of sentences. It allows complex ideas and statements to be expressed clearly. Compared with exemplar-based knowledge which conserves processing resources, rule-based knowledge needs high processing effort and is often difficult to operate, especially with restricted time for planning.

The following research questions will be addressed in the present study and hypothesis corresponding to each research question is established as follows based on the findings of related studies.

**RQ 1.** What is the effect of pre-task planning on language production by EFL learners in oral narrative tasks in terms of fluency, accuracy, and complexity?

**Hypothesis 1.1.** Language produced under the planned condition will be more fluent than the one produced under the unplanned condition, which follows the results of previous studies (Foster & Skehan, 1996; Mehnert, 1998; Mehrang & Rahimpour, 2010; Abdi et al., 2012).

**Hypothesis 1.2.** There will be no improvement in language production in terms of accuracy. Accuracy is strongly affected by monitoring in the process of on-line performance, hence pre-task planning is expected to have little effect on the production of more accurate speech.

**Hypothesis 1.3.** Little change will be observed in complexity, which is based on the findings by Mehnert (1998) who stated that greater complexity was only achieved under 10-minute planning condition. Since the planning time was operationalized at 3 minutes in the present study, it can be inferred that complexity will hardly be enhanced in the planned speech.

**RQ 2.** Will oral performance, i.e., CAF get improved under the pre-task planning condition with both high-proficiency and low-proficiency learners?

**Hypothesis 2.** High proficiency learners will benefit more from the pre-task planning as compared with low-proficiency learners in terms of fluency, accuracy, and complexity. This is based on the results of Wigglesworth's (1997) research.

## 2. Method

### 2.1 Task Materials

Two animated short films were selected for the experiment. One of the stories is called Runaway (see Figure 1.) with a video length of 3 minutes and 30 seconds. It is a story about a

misunderstanding between a man and his treasured 1950's refrigerator (Yung, Buchanan, & Parobek, 2013). The other one called Peck Pocketed (see Figure 2.), which lasts for 2 minutes, is a story about a blue bird desiring a luxury home, and seizes the opportunity one day when an old lady falls asleep at a park (Herron, 2014). Both of the videos are basically with no verbal content involved, making sure the influence of participants' English listening comprehension skills to be excluded.

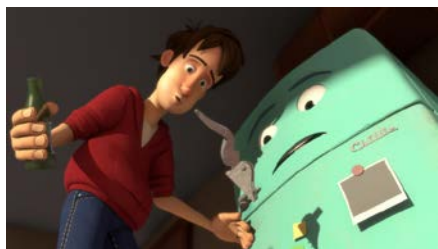


Figure 1. Runaway

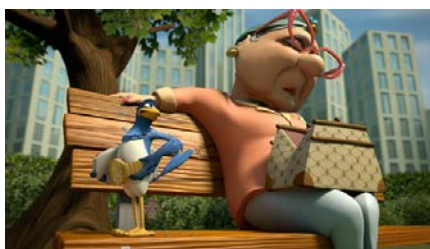


Figure 2. Peck Pocketed

## 2.2 Task Conditions

Planning time was manipulated at two levels, 30 seconds and 3 minutes respectively. Each participant was required to do two tasks under two different conditions shown as follows:

1. Watch the video (film1) → 30s → oral narrative task (3.5min)
2. Watch the video (film2) → 3min note-taking → oral narrative task (3.5min)

Participants in the pilot experiment had failed to perform the speaking task immediately after seeing the film, hence 30 seconds were permitted to participants rather than letting them start right after the film. The tasks required participants to narrate a story orally based on the video they had seen. Before seeing the short film, subjects were reminded that they could see the film for only once. For task 1, first, participants saw a film, and then they had 30 seconds to prepare themselves for the speaking tasks with no writing or note-taking involved. Then they were instructed to tell the story of the film in around 3.5 minutes. Task 2 differed from task 1 with respect to the stimulus material and the planning condition, though both tasks required the oral production of monologues. As for task 2, after participants watched the video, they were given 3 minutes to take notes, but were specifically instructed to try their best not to write down full sentences. They were also reminded that their notes sheets would be removed when time was up and their oral production would be made without looking at the notes in about 3.5 minutes as well. The reason for having them take written notes was to ensure that they did engage in the planning activity for 3 minutes. At the same time it was also considered important to make sure the two task conditions differ only in the planning section for the upcoming comparison between different planning conditions, hence the removal of notes prior to their speech.

## 2.3 Subjects and Setting

Subjects were 40 college and graduate school students at a university in Kobe, Japan. They were from a variety of majors and of different L1 backgrounds including Japanese, Chinese, Korean and Mongolian. Oxford Quick Placement Test (OQPT) (2001) was initially administered to randomly sample the subjects into low- and high-proficiency level groups of 20 people each. And the 20 people in each proficiency-level group were further divided equally into two groups to perform two tasks per person. Descriptive statistics for OQPT scores are shown in Table 1.

Table 1. *Descriptive statistics for OQPT scores across groups*

	Group I		Group II	
	I-Low	I-High	II-Low	II-High
n	10	10	10	10
Mean	28.7	32.9	27.5	33
Median	29.5	32.5	28.5	32.5
SD	1.6364	1.9692	2.8382	1.2472
Range	4	6	8	3
Min	26	31	22	32
Max	30	37	30	35

## 2.4 Experimental Procedures and Instructions

Placement test and audio recorded data were collected in a language lab. Each participant received an oral explanation of the experiment in English as they entered the lab. Using their first language was allowed in order to make sure the instructions make sense to them. Each participant performed the tasks with only the experimenter by their side. Before they started to do the tasks, a warm-up conversation was implemented in English by asking the participants some personal information such as name, age, first language, language learning experience, and scores of any English proficiency tests, in order to facilitate their language mode tuned to English.

## 2.5 Experimental Design

The study is a two-factor between-subjects design with two levels in each factor. Proficiency level and pre-task planning condition are the two variables being manipulated. Each participant was required to do two tasks of different task materials under different pre-task conditions. Data of 40 participants with 2 tasks for each subject were audio recorded and transcribed for further analysis. Description of the experimental construction is illustrated in Table 2.

Table 2. *Experimental construction*

	content

Runaway			Peck Pocketed		
pre-task planning	30s	I	lower-proficiency level	II	lower-proficiency level
			(10 participants)		(10 participants)
			upper-proficiency level		upper-proficiency level
	3min notes	II	(10 participants)	I	(10 participants)
			lower-proficiency level		lower-proficiency level
			(10 participants)		(10 participants)

## 2.6 Measures

After transcribing the recorded data, various analyses were carried out to evaluate subjects' performance on the oral narrative tasks in the three aspects of their language production — fluency, accuracy and complexity. These measures were largely the same as those used in the previous studies with a slight change to the measurement of fluency only.

### 1) Fluency

In order to measure the aspect of fluency in participants' speaking performance, two types of words per minute (WPM) were utilized, considering the values of both the original amount of speech and the meaningful output. WPM-I was calculated by dividing the total number of words in the transcript by total number of minutes each participant used to complete the task. WPM-II is similar with WPM-I but with all reformulations, false starts and repetitions excluded from the original transcript.

### 2) Accuracy

As for the aspect of accuracy, percentage of error-free clauses (EFC%) was used to indicate how accurate learners were in their speaking performance. Only grammatical errors were taken into account in this analysis.

### 3) Complexity

Complexity was evaluated both lexically and syntactically. Type-token ratio was the index for measuring lexical density. In order to measure the syntactical complexity of the speech, T-units and clauses including both independent and dependent clauses were first identified and counted. Then mean number of clauses per T-unit (C/T) and mean length of T-unit (MLTU) were utilized as the criteria for syntactic complexity units. The minimum value for the score MLTU is 1.00; that is, every T-unit contains only one clause.

## 2.7 Data Analysis

This study followed a 2 x 2 research design with two independent variables: pre-task planning condition and proficiency level. Both the pre-task planning variable and the proficiency level

variable were between-subjects factors each represented at 2 levels. A series of two-way between-subjects ANOVA were performed to test the two effects of interest in this experiment:

1. Planning Time: Do learners perform differently depending on the pre-task planning time?
2. Planning Time x Proficiency Level: Does the effect of pre-task planning time differ depending on the proficiency level?

As a follow-up, post-task interviews were conducted aiming to understand the following four questions: (1) Which task material was more difficult for the participants? Runaway or Peck Pocketed? (2) How did taking notes before speaking help participants with their speech? (3) What strategies did participants use while taking notes as well as in the performing stage?

### 3. Results

As indicated earlier, three aspects of language production were examined to see how the participants performed the oral narrative tasks. The results of the two-way between-subjects ANOVA will be reported separately in terms of fluency (WPM-I, WPM-II), accuracy (EFC%), and complexity (TTR, C/T, MLTU). And in what follows, answers to the research questions will be presented.

In the following sections, the letter ‘T’ will be used to represent pre-task planning time variable, and ‘P’ will be used as a representative for proficiency level variable. Two levels in each variable will be set as ‘1’ and ‘2’. For example, ‘T1P1’ stands for the group of low-proficiency participants who performed the task under pre-task planning condition of 30 seconds. See Table 3 for an illustration of representative codes for all four conditions.

Table 3. *Representative Codes for Variables (at Two Levels)*

		Proficiency (P)	
		Low (1)	High (2)
Time (T)	30s (1)	T1P1	T1P2
	3min (2)	T2P1	T2P2

#### 3.1 Fluency

As explained earlier, two types of WPM were used to measure fluency of the oral language production. The means for WPM-I and WPM-II in Runaway are shown in Table 4 and 5. Table 6 and 7 show the descriptive statistics for Peck Pocketed. Not surprisingly, high-proficiency groups achieved higher means of WPM-I and WPM-II than did low-proficiency groups under same pre-task conditions for both stories ( $M_{T1P1} < M_{T1P2}$ ,  $M_{T2P1} < M_{T2P2}$  in Table 4 to 7). Results of two-way ANOVA showed a significant effect of language proficiency level (WPM-I:  $p_{\text{Runaway}} = .003$ ,  $p_{\text{Peck Pocketed}} = .0202$ ; WPM-II:  $p_{\text{Runaway}} = .0006$ ,  $p_{\text{Peck Pocketed}} = .0353$ ). In other words, learners with high language proficiency level speak more fluently than their low-level

counterparts. Concerning the pre-task planning, ANOVA showed no significant effect for both stories (WPM-I:  $p_{\text{Runaway}} = .8404$ ,  $p_{\text{Peck Pocketed}} = .4438$ ; WPM-II:  $p_{\text{Runaway}} = .5537$ ,  $p_{\text{Peck Pocketed}} = .3792$ ). However, reviewing the descriptive statistics in Table 4 to 7, differences can be found between the two stories. In the case of Runaway, for subjects low in language proficiency, 3-minute condition led to more words per minute than did 30-second condition ( $M_{T2P1} > M_{T1P1}$  in Table 4 and 5). By contrast, for subjects high in proficiency, pre-task planning led to fewer words per minute than did no-planning condition ( $M_{T2P2} < M_{T1P2}$  in Table 4 and 5).

Table 4.

*Statistics for Runaway-WPM-I*

	Mean	SD		F	p		F	p
T1P1	66.30	12.3022	T	0.0412	0.8404 ns	T at P1	2.7499	0.1062 ns
T1P2	94.40	16.8602	P	10.1492	0.0030 **	T at P2	3.5994	0.0661 +
T2P1	77.70	20.2871	T x P	6.3310	0.0166 *	P at T1	16.7076	0.0002 ***
T2P2	81.00	8.9861				P at T2	0.2183	0.6432 ns

+ $p < .10$ , \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Table 5.

*Statistics for Runaway-WPM-II*

	Mean	SD		F	p		F	p
T1P1	52.40	13.6642	T	0.3576	0.5537 ns	T at P1	3.9627	0.0544 +
T1P2	76.90	12.3958	P	14.3843	0.0006 ***	T at P2	1.2167	0.2775 ns
T2P1	63.50	17.1610	T x P	4.7476	0.0362 *	P at T1	18.3250	0.0001 ***
T2P2	68.78	7.6938				P at T2	1.2679	0.2678 ns

+ $p < .10$ , \* $p < .05$ , \*\*\* $p < .001$

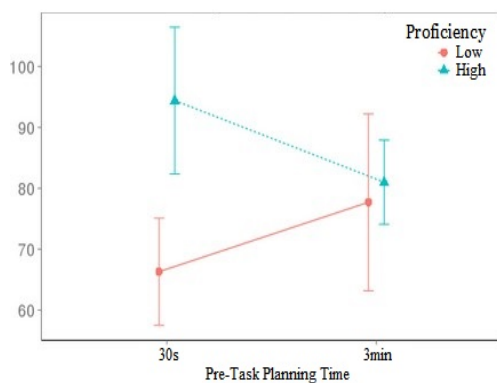


Figure 3. Interaction Plot for Runaway - WPM-I

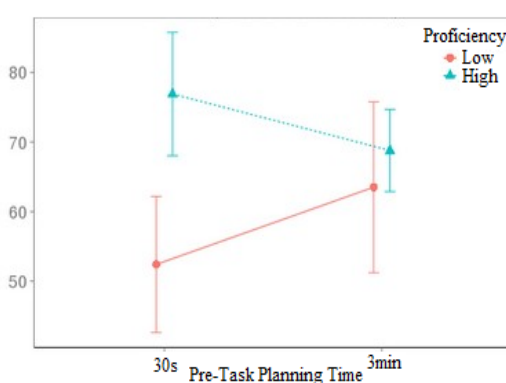


Figure 4. Interaction Plot for Runaway - WPM-II



The situation was opposite for Peck Pocketed, which shows a positive effect of pre-task planning for high-proficiency groups ( $M_{T2P2} > M_{T1P2}$  in Table 6 and 7), while negative for low-proficiency groups ( $M_{T2P1} < M_{T1P1}$  in Table 6 and 7).

Table 6.

*Statistics for Peck Pocketed - WPM-I*

	Mean	SD		F	p
T1P1	69.80	27.3122	T	0.6003	0.4438 ns
T1P2	76.50	20.0180	P	5.9355	0.0202 *
T2P1	65.38	7.2887	T x P	2.0611	0.1602 ns
T2P2	91.30	20.1497			

\* $p < .05$ 

Table 7.

*Statistics for Peck Pocketed - WPM-II*

	Mean	SD		F	p
T1P1	55.00	23.8234	T	0.7926	0.3792 ns
T1P2	59.60	13.6235	P	4.7820	0.0353 *
T2P1	52.10	16.2375	T x P	1.9365	0.1726 ns
T2P2	72.80	17.9369			

\* $p < .05$ 

These results indicate an interaction between pre-task planning time and proficiency level (T x P interaction). The form of the interaction can be seen in Figure 3 to 6. Only the T x P interaction in the Runaway task is shown to be significant (WPM-I:  $p = .0166$ ; WPM-II:  $p = .0362$ ). Post-analysis of the simple effects of T x P interaction showed only the significant effect of proficiency at the level 1 of pre-task planning variable (WPM-I:  $p = .0002$ ; WPM-II:  $p = .0001$ ), which means high-proficiency learners speak more fluently than low-proficiency learners under no-planning condition.

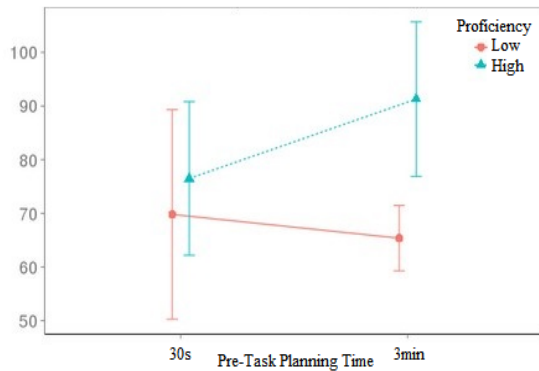


Figure 5. Interaction Plot for Peck Pocketed - WPM-I

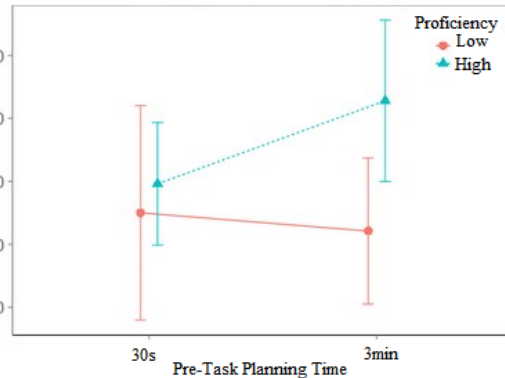


Figure 6. Interaction Plot for Peck Pocketed - WPM-II

### 3.2 Accuracy

Percentage of error-free clauses (EFC%) was used as the index for accuracy. Means and standard deviations of EFC% in Runaway tasks are shown in Table 8. It can be seen that means for EFC% are same for low-proficiency groups regardless of being with or without pre-task planning ( $M_{T1P1} = M_{T2P1}$  in Table 8; see Figure 7). For high-proficiency groups, the mean for EFC% decreases  $60.39\% - 51.30\% = 9.09\%$  under 3-minute planning condition ( $M_{T1P2} > M_{T2P2}$  in Table 8). Results of two-way ANOVA show only the significant effect of proficiency level ( $p = .005$ ), while no significant effects are indicated for pre-task planning time ( $p = .4372$ ) and T x P interaction ( $p = .4371$ ).

Table 8.

*Statistics for Runaway - EFC%*

	Mean	SD		F	p
T1P1	38.54	23.8850	T	0.6176	0.4372 ns
T1P2	60.39	12.8502	P	8.9627	0.0050 **
T2P1	38.54	14.3785	T x P	0.6178	0.4371 ns
T2P2	51.30	18.4423			

\*\* $p < .01$

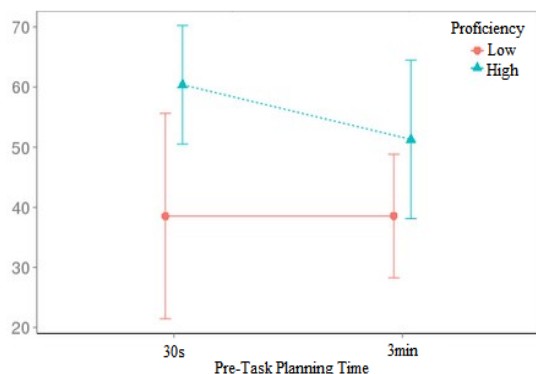


Figure 7. Interaction Plot for Runaway - EFC%

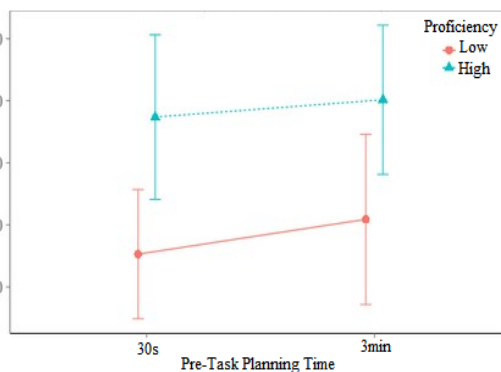


Figure 8. Interaction Plot for Peck Pocketed - EFC%

According to Table 9 which shows statistics related to EFC% in the Peck Pocketed task, means for EFC% slightly increased under 3-minute planning condition in comparison with 30-second condition for both low-proficiency and high-proficiency groups. However, the result of ANOVA shows the difference between the two conditions is not significant ( $p = .4498$ ). The two lines in Figure 8, which represent changes of EFC% in the two planning conditions, are almost parallel, indicating a small probability of T x P interaction. The result of two-way ANOVA also proved this indication ( $p = .7988$ ). As in Runaway tasks, proficiency level appears to make a significant difference in accuracy ( $p = .0006$ ), showing, perhaps not surprisingly, language uttered by high-proficiency learners is more accurate than low-proficiency learners.

Table 9.

*Statistics for Peck Pocketed - EFC%*

	Mean	SD		F	p
T1P1	25.29	14.5413	T	0.5839	0.4498 ns
T1P2	47.38	18.5321	P	14.1858	0.0006 ***
T2P1	30.90	19.1819	T x P	0.0660	0.7988 ns
T2P2	50.17	16.8172			

\*\*\* $p < .001$ 

### 3.3 Complexity

Lexical and syntactic variables were assessed to measure the complexity of learner language. Type-token ratio was used as an index for lexical density. Syntactic complexity was indexed by the number of clauses per T-unit and the mean length of T-unit.

#### 3.3.1 Type-Token Ratio (TTR)

Figure 9 and 10 show the T x P interaction plots for TTR. Only subtle difference can be observed between 30s- and 3min- condition for low-proficiency groups, indicating low-proficiency learners seemed to benefit little from the provision of pre-task planning. The situation for high-proficiency learners differs depending on the stories. With Runaway task, the mean in 3min condition was smaller than in 30s condition. However, with Peck Pocketed task, the mean of TTR was larger in 3min condition. The results of two-way ANOVA, which are shown in Table 10 and 11, indicate that neither pre-task planning variable ( $p_{\text{Runaway}} = .6708$ ;  $p_{\text{Peck Pocketed}} = .3839$ ) nor proficiency level ( $p_{\text{Runaway}} = .5205$ ;  $p_{\text{Peck Pocketed}} = .4128$ ) has significant effect on TTR. However, caution needs to be taken to not over-interpret the results. Direct inspection of the descriptive statistics and interaction plots, to some level, provides clues to the interactive effect of language proficiency and pre-task planning on lexical density. It can be tentatively concluded that pre-task planning has little effect on lexical density for low-proficiency learners. By contrast, high-proficiency learners seemed to be easily effected by pre-task planning. Whether the effect is positive or negative seems to be depending on the stories. A combined effect of task conditions and task materials *per se* should be counted to produce the difference.

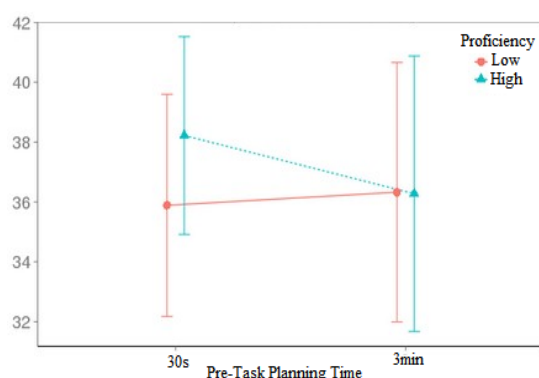


Figure 9. Interaction Plot for Runaway - TTR

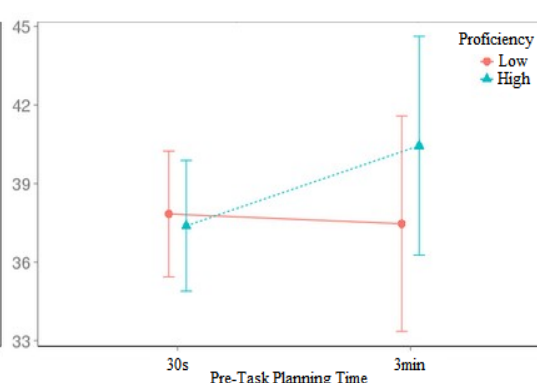


Figure 10. Interaction Plot for Peck Pocketed - TTR%

Table 10.

*Statistics for Runaway - TTR*

	Mean	SD		F	p
T1P1	35.89	5.1870	T	0.1837	0.6708 ns
T1P2	38.22	4.6225	P	0.4214	0.5205 ns
T2P1	36.33	6.0576	T x P	0.4595	0.5023 ns
T2P2	36.28	5.9891			

Table 11.

*Statistics for Peck Pocketed - TTR*

	Mean	SD		F	p
T1P1	37.84	3.3592	T	0.7774	0.3839 ns
T1P2	37.38	3.2482	P	0.6870	0.4128 ns
T2P1	37.47	5.7504	T x P	1.2674	0.2679 ns
T2P2	40.44	5.8443			

### 3.3.2 Number of Clauses Per T-Unit (C/T)

According to Table 12 and 13, no significant results were found for the effect of pre-task planning ( $p_{\text{Runaway}} = .2393$ ;  $p_{\text{Peck Pocketed}} = .8157$ ). The effect of the variable of proficiency was only found statistically significant in Peck Pocketed tasks ( $p = .0365$ ). Descriptive data in Table 12 and 13 illustrates an overall higher mean number of clauses per T-unit in Runaway tasks than in Peck Pocketed tasks. The relatively horizontal lines of low-proficiency groups in Figure 11 and 12 indicate that low-proficiency learners seem to be less prone to be effected by pre-task planning in terms of the number of clauses per T-unit.

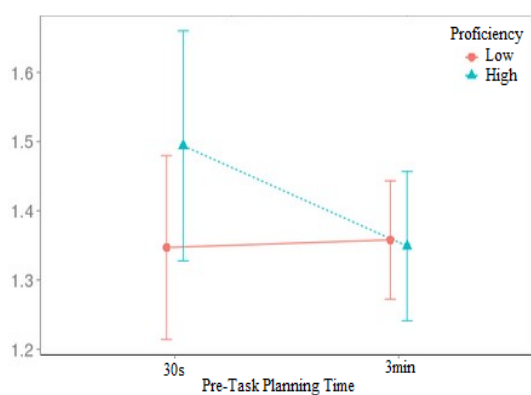


Figure 11. Interaction Plot for Runaway - C/T

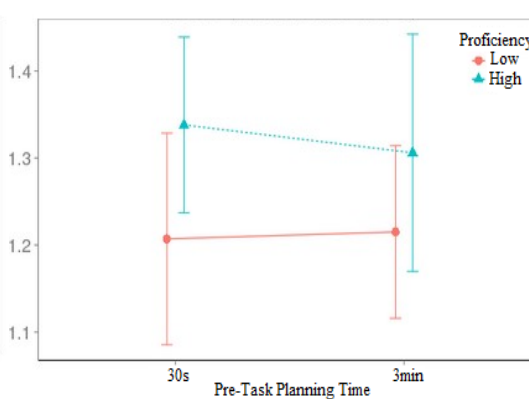


Figure 12. Interaction Plot for Peck Pocketed - C/T

Table 12.

*Statistics for Runaway - C/T*

	Mean	SD		F	p
T1P1	1.35	0.1856	T	1.4318	0.2393 ns
T1P2	1.49	0.2323	P	1.5185	0.2258 ns
T2P1	1.36	0.1194	T x P	1.9405	0.1722 ns
T2P2	1.35	0.1508			

Table 13.

*Statistics for Peck Pocketed - C/T*

	Mean	SD		F	p
T1P1	1.21	0.1700	T	0.0552	0.8157 ns
T1P2	1.34	0.1412	P	4.7194	0.0365 *
T2P1	1.22	0.1387	T x P	0.1532	0.6978 ns
T2P2	1.31	0.1907			

\*p &lt; .05

### 3.3.3 Mean Length of T-Unit (MLTU)

Two-way ANOVA revealed that no significant effects were found for pre-task planning and proficiency level on MLTU ( $p_T = .3227$ ,  $p_P = .5926$ , in Table 14;  $p_T = .9015$ ,  $p_P = .6212$ , in Table 15). Overall higher means for Peck Pocketed task than Runaway task can be observed according to Table 14 and 15, which indicates a possible connection between MLTU and the story *per se*.

Table 14.

*Statistics for Runaway - MLTU*

	Mean	SD		F	p
T1P1	11.40	2.2211	T	1.0053	0.3227 ns
T1P2	11.20	2.0976	P	0.2915	0.5926 ns
T2P1	10.90	1.7920	T x P	0.0535	0.8183 ns
T2P2	10.40	2.0656			

Table 15.

*Statistics for Peck Pocketed - MLTU*

	Mean	SD		F	p
T1P1	12.40	1.1738	T	0.0155	0.9015 ns
T1P2	12.60	2.3190	P	0.2485	0.6212 ns
T2P1	12.30	3.1990	T x P	0.0621	0.8046 ns
T2P2	12.90	2.9609			

## 3.4 Answering the Research Questions

**RQ 1.** What is the effect of pre-task planning on language production by EFL learners in oral narrative tasks in terms of fluency, accuracy, and complexity?

**Hypothesis 1.1** stated that speech planned prior to the performance would be more fluent than the unplanned

speech. The results of two-way ANOVA illustrate that pre-task planning does not have a significant effect on speech fluency. Besides, as for high-proficiency learners, WPM-I decreased with planning time available in Runaway task. Hypothesis 1.1 thus was not confirmed. However, it must be noted here that, results of post analysis of simple effects in Table 5 provide limited support. Regarding WPM-II in the performance of Runaway task, the effect of pre-task planning at the level of low proficiency approached an acceptable level of statistical significance ( $p = .0544$ ).

**Hypothesis 1.2** stated that providing learners with time to plan their speech would not make any change to the accuracy of their speech. The two-way ANOVA revealed no significant effect of pre-task planning for accuracy, as indexed by the percentage of error-free clauses. Therefore, hypothesis 1.2 was sustained.

**Hypothesis 1.3** stated that little improvement would be observed for complexity. TTR, the number of clauses per T-unit, and the mean length of T-unit were measured to assess the complexity. Results of two-way ANOVA indicate that the difference between planned and unplanned speech with regard to these items was not significant. Overall, it can be concluded that hypothesis 1.3 received broad confirmation.

**RQ2.** Will oral performance get enhanced under pre-task planned condition with both high-proficiency and low proficiency groups?

It has been predicted in hypothesis 2 that high-proficiency learners would benefit more from the pre-task planning than low-proficiency learners in terms of fluency, accuracy, and complexity. The question relates to the problem of whether an interaction exists between the two variables of pre-task planning time and proficiency level. According to the results of ANOVA, T x P interaction was only significant for fluency in Runaway tasks. Further analysis of the simple effect of pre-task planning at the level of 'proficiency' reveals no significant result. In general, it can be concluded that the impact of pre-task preparation does not seem to differ depending on proficiency level. In other words, high-proficiency learners may not benefit more from the provision of pre-task planning time than low-proficiency learners. Therefore, hypothesis 2 is rejected.

## 4. Discussion

### 4.1 Fluency

The findings of this study indicate that pre-task planning does not seem to have notably positive effect on fluency of the participants' speaking performance. This appears to be running counter to the results of previous studies in the literature reviewed. Pre-task planning has been manipulated at 10 minutes in the majority of the previous studies. However, in the present study, planning time was manipulated at 3 minutes. It is reported in Mehnert (1998) that speech fluency increased as pre-task planning got longer. So with all these facts combined, the most possible reason for such a result would be 3 minutes of pre-task planning time set in the present study is not long enough to make a difference as far as fluency is concerned. Moreover, participants mainly focused on recalling the story of the film and writing down some keywords, based on a direct inspection of participants' notes and the results of post-task interview. They paid more attention to what to say rather than how to say. Pre-task planning is highly possible to help reducing the amount of planning needed during the speech, however, whether the effect of pre-task planning is great or

not definitely depends on the activities during the process of pre-task planning. The production of spoken language consists of conceptualization, formulation, and articulation, which is an integrated process that not a single step can be omitted. Obviously participants spent their time on conceptualization before the actual performance. Even though they did write down some words before the speech which might reduce the task demand, the processing load while they were speaking was still huge due to limited processing capacity, because they had to access their rule-based knowledge (grammar) as well as exemplar-based knowledge (lexical chunks) to formulate sentences in their mind and finally articulate the speech.

Overall results of ANOVA have shown to be statistically non-significant for the effect of pre-task planning, but for low-proficiency participants in Runaway task, WPM-II increased with pre-task planning, and the effect reached acceptable significance. Means for WPM-I also increased but did not reach a significant level. WPM-II was calculated from the edited transcript that all of the reformulations, repetitions, and false starts were removed from the original one. A significant effect on WPM-II indicates the meaningful output increases with pre-task planning. Contrary to the increase in the means of WPM-I and WPM-II with low-proficiency participants, both indices decreased with high-proficiency participants, with WPM-II showing a near significance. As stated above, 3 minutes of planning time hardly can have a notable effect on fluency. This may be even true for high-proficiency learners. The decrease in fluency observed with high-proficiency participants is probably because processing load increased when participants were trying to recall the notes while at the same time performing the task. To put it simply, participants may be distracted with the preceding notes, consequently leading to less fluent speech in pre-task planning condition than in no planning condition.

In comparison with the result in Runaway task where a negative effect of pre-task planning was found with high-proficiency learners, the means of WPM-I and WPM-II increased in Peck Pocketed under pre-task planning condition. According to the results of post-task interviews, Peck Pocketed task seems to be more difficult than Runaway task. Considering both proficiency level and task difficulty, high-proficiency learners are more inclined to perform better with pre-task planning on more difficult tasks, which supports the findings of Wigglesworth (1997).

## 4.2 Accuracy

The effect of pre-task planning on accuracy has been inconclusive among a number of previous studies. Results of the present study did not show a statistically significant effect on accuracy as a result of pre-task planning regardless of proficiency level, which indicates that pre-task planning has no effect on improving speech accuracy. This result lends support to the findings in studies of Crookes (1989), Yuan and Ellis (2003), Mehrang and Rahimpour (2010), and Abdi et al. (2012). Basically all of the participants recalled that when they were provided with time to plan their speech before the actual performance, they put emphasis on the content of the story rather than how to tell the story. In addition, some participants said that they felt pressured to speak in a



limited amount of time, which made them forget the structures they planned to use in the performance. It seems that learners naturally prioritize content at the expense of accuracy. Along with that, Yuan and Ellis (2003) reported that accuracy only got improved under the on-line performing condition. It is no doubt that speaking within a limited time span imposes heavier processing load than performing under on-line condition. Such a heavy processing load results in a difficulty of consistent monitoring of accurate language use, for instance, all participants in the present study failed to keep verb tenses consistent while performing the task. This seems to be indicating an attention trade-off effect between accuracy and fluency.

### **4.3 Complexity**

As for complexity, results of the study indicate that pre-task planning has little or no effect on speaking performance. This partly confirms the results of Mehnert (1998) which reported that greater complexity was only achieved with 10-minute pre-task planning. Learners attempt to produce more complex language only when they were given a longer planning time. Clearly 3 minutes of pre-task planning was not able to make a difference. Generally speaking, both high- and low- proficiency learners do not seem to benefit from a short period of pre-task planning time. However, care needs to be taken not to over-interpret the results. After all, the tasks, that participants required to perform, were all speaking tasks. Spoken language is distinguished from written language in many ways. It is a little inappropriate to expect learners' spoken language to have features that written language tends to have. For example, written language tends to be more complex and intricate with long sentences and many subordinate clauses. Other than that, little difference in indices of complexity between low- and high- proficiency groups indicates an inherent relation between the task material and language complexity.

## **5. Conclusions and Further Research**

The study is designed to explore the effect of pre-task planning on oral narrative task performance by EFL learners in the aspects of fluency, accuracy, and complexity. Pre-task planning time and proficiency level were the two variables being manipulated each at two levels. The interaction between pre-task planning time and proficiency level was also investigated to clarify whether the effect of pre-task planning would work the same for both low- and high-proficiency learners. Rationale behind the research is learners can not attend simultaneously to fluency, accuracy, and complexity due to the limited capacity of working memory. It is assumed that a trade-off effect or competition exists either between fluency and accuracy or between accuracy and complexity.

Findings of the study suggest that pre-task planning may either enhance or impede fluency depending on proficiency level and task difficulty. Low proficiency learners seem to benefit from pre-task planning on easier tasks. As for high-proficiency learners, pre-task planning is only

beneficial for more difficult tasks. Pre-task planning has no effect on accuracy particularly for tasks that need to be performed in a limited amount of time, for the reason that processing load becomes heavy in monitoring speech production to make it as accurate as possible. The more attention needs to be spared to monitoring the accuracy, the more likely it comes to a breakdown. Or, put differently, when the time gets longer to perform the task, the less possible it is for learners to maintain the accuracy level. A more in-depth study of comparing speech production under pre-task planning and on-line planning may generate a greater understanding of the effect of planning on accuracy. Complexity seems to be less prone to be affected by pre-task planning. Findings of the study indicate an intrinsic relation between task material and language complexity.

Learners are inclined to put emphasis on meaning at the expense of forms when they are provided with a relatively short period of time to plan their speech prior to the performance. The present study failed to confirm the hypothesis that language produced under planned condition will be more fluent than the one produced under the unplanned condition. Taking consideration of participants' reports in post-task interviews and a direct inspection of the transcripts, we may tentatively postulate that a trade-off effect exists between fluency and accuracy. A further study of individual approaches should be suggested to sustain the hypothesis.

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# **The Effects of Pre-Task Planning and Proficiency Level on Fluency, Accuracy, and Complexity of EFL Learners' Oral Narrative Task Performance**

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## **Abstract**

The study is designed to explore the effect of pre-task planning on oral narrative task performance by EFL learners in the aspects of fluency, accuracy, and complexity. Pre-task planning time and proficiency level were the two variables being manipulated each at two levels. The interaction between pre-task planning time and proficiency level was also investigated to clarify whether the effect of pre-task planning would work the same for both low- and high-proficiency learners. Rationale behind the research is learners can not attend simultaneously to fluency, accuracy, and complexity due to the limited capacity of working memory. It is assumed that a trade-off effect or competition exists either between fluency and accuracy or between accuracy and complexity.

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