Investigating the Impact of Task-based Instruction on Iranian L2 Narrative Oral Production

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ABSTRACT

This study sought to test Robinson's (1995a; 2003b) cognitive hypothesis by investigating the effect of task complexity on L2 narrative oral production. In order to homogenize the participants, Cambridge Placement was taken from among 74 students of the Iran Language Institute and 44 of them were chosen. Independent sample T-tests were used for between group comparisons. According to the hypotheses, Pre-task planning time allowed second language speakers to activate words and apply a series of problem-solving mechanisms prior to task performance and may take stress away from L2 speakers so that they can meet task demands and hopefully, stretch their interlanguage. The data can shed some lights on how production is affected by different degrees of cognitive complexity and also in pedagogic contexts can be easily manipulated to promote fluency and accuracy if planning time is provided.

Introduction

In recent years, Task-Based Language Teaching (TBLT) has led to numerous pedagogical foundations and theoretical investigations in the field of second language (L2) teaching among L2 teachers and researchers. Hence, a number of researchers, syllabus designers, and educational innovators have set out a move in language teaching towards task-based approaches (Prabhu, 1987; Nunan, 1989; Ellis, 2003). Nowadays, language teachers consider TBLT as an approach to L2 instruction that has the ability to provide them with new insights into the most effective ways of teaching L2. Defining task complexity (TC) is of great importance in task-based language teaching, because it helps educators to have a better understanding of task performance, design, and development. Studies in task-based language learning and assessment claim that the cognitive complexity of a specific task influences the learners' task performance. The study conducted by Robinson (2001) found that the complex mono-logic tasks elicited less fluent, but more accurate and complex results than the simple tasks. This result supports his argument that the increase in task complexity will promote learners' oral production and facilitate language development by attracting their attention towards more complex discourse to meet the linguistic and functional needs embedded in a particular task. Robinson's Triadic Componential Framework (2001a; 2001b; 2003; 2005) also distinguishes three dimensions, which interact to influence task performance and learning. These are: task complexity, task conditions and task difficulty. Task complexity, corresponding to Skehan and Foster's cognitive complexity dimension, refers to two types of cognitive task features, resource-directing and resource-dispersing variables, which can be manipulated to increase or decrease the cognitive demands made by a task.

Over the years, numerous researches have been conducted on the role of tasks in second language acquisition. Thus, given the significance of this issue, the researcher attempted to evaluate if Iranian EFL learners' accuracy, fluency, and lexical and structural complexity of L2 oral production were affected by increasing task complexity and instruction of tasks.

Literature review

Nowadays, L2 researchers have primarily showed interest in whether the manipulation of planned conditions positively affects learners' oral or written performance in terms of accuracy, fluency, and complexity (e.g., Ellis, 1987, 2009; Mehrang & Rahimpour, 2010; Ortega, 1999; Skehan & Foster, 1997, 1999; Tavakoli & Skehan, 2005; Wigglesworth & Elder, 2010).

The first significant study on planning was conducted by Ellis (1987), in which he investigated the impact of planning on oral production. Ellis proposed that the forms which have not yet been fully automatized by learners are more likely to be accessed and used under the planned condition. He argued that the opportunity for planned output facilitates learners to acquire new, more difficult forms, which are eventually internalized in the process of speech output. Ellis's research results showed that the accuracy of performance over the three past tense morphemes was strongly associated with the availability of planning time. The first task demonstrated the highest accuracy of performance and the third task showed the least accuracy.

Another study conducted by Wigglesworth and Elder (2010) in testing context, investigated the relationship between three variables in the IELTS oral module (planning, proficiency, and task). Their objective was to determine whether the differences in performance emanated from 1 or 2 minutes of planning time. In addition, it aimed at realizing the most effective strategies utilized by candidates in their planning. Neither the analysis of the scores nor the discourse analysis indicated any significant difference in performance according to the amount of planning time learners were equipped with.

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In this regard, Mehnert (1998) also discussed the influence of different amounts of planning time on L2 oral performance. This result of Mehnert's research seemed to support the concept of trade-off effects between accuracy and complexity offered by Skehan and Foster (1997). When the participants were given 1 minute for planning, accuracy was enhanced. Ten minutes of planning time made it possible for the participants to generate more complex language. Because of their limited capacity for attentional resources, learners have inclination to achieve accuracy or complexity at one time. Although this suggested that candidate does not positively benefit from planning time, Wigglesworth and Elder (2010) have discussed the fact that 1 minute of pre-task planning should be considered as an alternative in the test development process in order for fairness and boosting the face validity of the test. Unlike most studies on planning, Park (2010) separated pre-task instructions from planning, hence making it evident that what brought about the improvement in planned performance. Park's (2010) study examined whether pre-task instructions and planning enhance the focus on form during the task-based interaction. The findings indicated that irrespective of pre-task instructions and planning opportunity, the learners concentrated on vocabulary. Moreover, while pre-task instructions displayed a minor role in attracting attention to form, planning did not show any impact.

In another study, Iwashita et al. (2001) investigated the effects of manipulating complexity on L2 learners' fluency, complexity, and accuracy. Iwashita et al. found that there was no significant difference between easy and difficult versions of tasks except for accuracy. In case of immediacy, they found that the more difficult the version of tasks, that is, in There-and-Then, the higher the levels of accuracy will be, and this finding went against their prediction. Up to the present time, to the researcher`s knowledge, there has been only one study (Gilbert, 2007) that has two basic differences: the first one refers to the fact that this research was speech-based and the second one is that the instructions were slightly different. A matter of bottom line, which is worth mentioning here, is the fact that assuming there were some studies on +/−planning as well as +/_Here-and-Now on L2 learners writing, these studies were done separately. The exact meaning of the concept is that with regard to writing, there has been no attempt to merge resource-directing (+/−Here-and-Now) and resource-dispersing factors (+/_planning time) simultaneously out of which four conditions emerge. Hence, more researches needed to be performed in this regard. The present study set out to investigate how planning time along with +/-Here-and-Now would affect Iranian EFL learners' Second Language Oral production.

Research Hypotheses

The study attempted to verify or reject the following null hypotheses:

1. The instruction doesn't have any effect on L2 oral production accuracy, fluency and complexity in performing narration task (that is, planning time There-and-Then).
2. The instruction doesn't have any effect on L2 oral production accuracy, fluency and complexity in performing narration task (that is, Here-and-Now).

Methodology

74 advanced level candidates from Iran Language Institute participated in this experiment and in order to assure the homogeneity of the participants, the Cambridge Placement test (2010) was administered. Therefore, according to the placement test from among 74 candidates just 44 of them were selected for the study.

Piloting the picture story was carried out with a small number of students before data collection in order to make sure about the difficulty and length of them. Three picture stories were originally selected and learners were interviewed on the clarity of the stories, as well as on their perception of difficulty in terms of narrating them and the difficulty of the vocabulary. Once the difficulties of the three wordless stories were assessed, only one of them was selected and used for data collection. The story used in this research was selected from SEQUENCES PICTURE STORIES FOR ESL (Julich, 2006). The story was thought to be especially useful for data collection because the book was all wordless sequence picture stories. The subjects of the study were randomly divided into two groups; the experimental group and control group. Both groups contained 22 people. The Experimental group received five treatment sessions. During each session the researcher tried different tasks with participants related to their oral performances. During five sessions in the control group class, the researchers did not do any task but the common method of the ILI which was free discussion and listening to the tape. Students were told that their voice would be recorded while performing the tasks in English. The instruction of the task was given to the participants and they performed the task in the instructed way. Students were asked to think about the task they had to do. Each subject, after introducing him-/herself, started to perform the tasks and it was recorded on a recorder. In the narration task, the examinees were asked to re-tell a story on the basis of a sequence of 6 pictures. Both groups were provided with 10-minute planning time in order to preplan what to say and how to say.

Data collection took place in a session in the ILI with each learner. The researchers talked about the instruction of the narrative task. Then Learners sitting face to face with the researchers, after a few minutes of personal information data collection, were asked to narrate the story under the two levels of task complexity (planned Here-and-Now & planned There-and-Then). The researchers provided learners with one or two words (e.g. pay phone). During their narration the researchers recorded their voices. Following several studies (Foster & Skehan, 1996; Skehan & Foster, 1997; Mehnert, 1998; Ortega, 1999), it was found that operationalization of planning time was 10 minutes for planned narratives. When planning time was available, subjects were encouraged to take notes on what to say and how to say it while planning. Regarding the Here-and-Now/ There-and-Then distinction, this research followed Robinson's (1995a) operationalization. For Here-and-Now, learners were asked to narrate the story in the present tense while looking at the strips. For There-and-Then, learners were asked to narrate the story in the past tense, while they were not allowed to look at the pictures as performing the task.

When all of the participants finished their performance, the subjects' speeches were transcribed by the researcher.

Results

H1: Table 1 shows if 8 factors involved in speaking of participants are affected by instruction in performing narration task in There-and-Then condition by comparing means of experimental and control groups.

Table 1 shows the mean differences and the level of significance between experimental and control group's performance of planned There-and-Then condition.

Table 1.Table of comparison between experimental and control group in There-and-Then condition.

Variables	Independent Samples Test						
	Groups	Number	Mean	t	d.f	Sig	Result
Fluency Rate A	Experimental	22	105.69	7.37	42	.00	They have significant differences
	Control	22	69.81				
Fluency Rate B	Experimental	22	113.49	5.79	42	.00	They have significant differences
	Control	22	64.76				
% lexical words	Experimental	22	45.97	1.02	42	.30	They have no significant differences
	Control	22	44.83				
%lexical to function	Experimental	22	87.39	1.98	42	.50	They have no significant differences
	Control	22	81.36				
S-Nodes per T-unit	Experimental	22	1.32	2.66	42	.01	They have significant differences
	Control	22	1.21				
Error free T-units	Experimental	22	80.13	9.74	42	.00	They have significant differences
	Control	22	59.68				
TLU of articles	Experimental	22	82.51	6.58	42	.00	They have significant differences
	Control	22	58.39				
% self-Repair	Experimental	22	69.50	8.94	42	.00	They have significant differences
	Control	22	42.93				

Fluency: Rate A: as a result of instruction and given planning time, learners produced significantly more fluent speech (p<.05) when performing in the planned there-and-then condition in the experimental group than when doing so in planned there-and-then condition in the control group. Regarding Rate B, learners were significantly more fluent (p<.05) when narrating tasks in the There-and-Then condition in the experimental group than when doing so in the planned there-and-then condition in the control group.

Complexity: Lexical complexity: in the control group lexical complexity didn't reduce as much as that of the experimental group. Results didn't show significant differences between two groups. It means that the instruction doesn't have any effect on lexical complexity. Regarding the ratio of lexical to function words the instruction didn't reduce the number of errors that were repaired when tasks were performed under planned conditions in both groups. Differences didn't reach statistical significance. Taken together, two measures of lexical complexity show that the instruction done on the experimental group didn't have any impact on learners' lexical complexity. But, as seen in Table 1, significant differences were found between the experimental and the control groups' structural complexity.

Accuracy: The instruction done on the experimental group had a strong, positive impact on learners' accuracy. All the measures in the control group, the percentage of error-free T units, the Target-like use of articles and the percentage of self-repairs showed lower attention to form than the experimental group. So, it can be concluded that the first hypothesis is rejected.

H2: Instruction does not have any effect on L2 oral production accuracy, fluency and complexity in performing narration task (that is, planning time Here-and-Now).

Table 2 shows the mean differences and the level of significance between experimental and control groups' performance of narration task under planned Here-and-Now condition.

Fluency

Rate A: As a result of instruction, learners produced significantly more fluent speech (p<.05) when performing in the planned Here-and-Now condition in experimental group than when doing it in planned Here-and-Now condition in control group. Regarding Rate B, learners were significantly more fluent (p<.05) when narrating tasks in the Here-and-Now condition in experimental group than when doing so in the planned Here-and-Now condition in control group.

Complexity: Lexical complexity: In the control group lexical complexity didn't reduce as much as that of the experimental group. Results didn't show significant differences between two groups. Regarding the ratio of lexical to function words the instruction didn't reduce the number of errors that were repaired when tasks were performed under planned Here-and-Now condition in both groups. Taken together, the two measures of lexical complexity show that the instruction does not have a strong impact on lexical complexity. Significant differences were not found between experimental and control groups' structural complexity.

Table 2. shows if 8 factors involved in speaking of participants are affected by narration task complexity in Here-and-Now condition by comparing means of the experimental and the control groups.

Variables	Independent sample test						
	Groups	number	Mean	t	d.f	ig	Result
Fluency Rate A	Experimental	22	104.73	7.16	42	.00	They have significant differences
	Control	22	66.99				
Fluency Rate B	Experimental	22	103.87	8.19	42	.00	They have significant differences
	Control	22	61.72				
% lexical words	Experimental	22	46.34	-.13	42	.89	They have no significant differences
	Control	22	46.52				
%lexical to function	Experimental	22	85.21	-.51	42	.61	They have no significant differences
	Control	22	87.02				
s-Nodes per T-unit	Experimental	22	1.15	-.39	42	.96	They have no significant differences
	Control	22	1.15				
Error free T-units	Experimental	22	85.92	10.04	42	.00	They have significant differences
	Control	22	64.03				
TLU of articles	Experimental	22	90.82	10.42	42	.00	They have significant differences
	Control	22	59.18				
% self-Repair	Experimental	22	89.81	16.62	42	.00	They have significant differences
	Control	22	54.91				

Accuracy

Totally, as a result of instruction, all the measures in control group, the percentage of error-free T units, the Target-like use of articles and the percentage of self-repairs showed lower attention to form than experimental group. So, it can be concluded that the second hypothesis is rejected too.

Discussion and Conclusions

This study was in line with Skehan & Foster (1999) who claimed that instruction of the task generated more fluent and more accurate performance while complexity left unaffected. In addition, Lopez (2004) found that Task-based-instruction makes students learn English more affectively and speak more accurately and fluently. Nashash (2006) stated that by using TBI students' fluency improve and also according to Aljarf (2007) by task instruction the students could speak fluently, use grammar and pronunciation correctly and generate ideas easily.

One of the first conclusions that can be reached from the results presented in this paper, and the task-based studies shown in general is that tasks may be manipulated to obtain specific effects on production. In this study, Task Complexity was shown to mediate with production and interact with attention and memory processes. As shown by the results of manipulating planning time and the +/- Here-and-Now variables, each variable affected production for different reasons. Firstly, the variety and precision of the words used by learners during performance is also enhanced by pre-task planning time. When learners hesitate and pause too much, and are aware that they are not performing accurately because the task is being perceived as too difficult, they may not be able to meet the demands imposed by the tasks. In this sense, pre-task planning time may take stress away from L2 speakers so that they can meet task demands, take risks and, hopefully, stretch their interlanguage. Secondly, increasing complexity along planning time, however, is also important. If pedagogic tasks are to be organized in such a way that they approximate real-world conditions, progressively reducing the planning time allotted to pedagogic tasks seems important, too. Thirdly, planning time may permit the noticing and cognitive comparison micro-processes suggested by Doughty (2001). If learning is to take place, processing in working memory must allow not only for the retrieval of words and their grammatical encoding but also for monitoring of what is being said against what is intended, a process which planning time can but facilitate. The other conclusion is that the task-based method of teaching and learning in comparison with the traditional method is more effective in improving learners' oral production.

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