

## The Effect of Generative Study Strategies on EFL Learners' Reading Comprehension and Recall of Short Stories

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### Abstract

*EFL learners often tend to shift the major load of language learning task to the reading skill, due to insufficient access to the spoken mode of language. Experiences of practitioners as well as various research reports in the literature indicate that the more actively learners get engaged with the reading materials, the more profound their comprehension of the reading texts would be. Drawing on Wittrock's 'generative learning theory' (e.g., 1992), this paper has investigated the effect of summarization and question generation, as two generative strategies, on EFL learners' reading comprehension and recall of literary texts. Three homogeneous groups of undergraduates (both males and females) participated in this study (N=63). They were randomly assigned to attend a 'short-stories' course in three different sections. The participants in section A were trained how to summarize the short stories in their own words, those in section B generated questions out of the texts, but those in section C (i.e., the control group) were not asked to apply either of the two strategies. The results of administering a reading comprehension achievement test and a recall test indicated that the two experimental groups outscored the control group on both tests.*

### 1. Introduction

Text-based, expository instructional materials, such as textbooks, even in the beginning of the 21st century, when the dominance of online materials, or computer-based media, television, video, radio, and other new technologies seem to have eclipsed books and print media, still continue to be significant resources for learners at all educational stages for academic purposes (see McGriff, 2001

Due to the lack of sufficient exposure to the spoken mode of English in an EFL environment, from among the four major language skills—namely, understanding speech, speaking, reading and writing—reading has probably been recognized as the most important skill for foreign-language learners in academic contexts (see Grabe, 1991). The importance of reading skill to language learning and language instruction has been to the extent that during a certain period in the history of language learning/teaching, a specific approach under the rubric of “reading approach” emerged which focused on reading as an important tool for language learning (Brown, 1994, p. 44). Today, views of reading theory have changed so dramatically that reading is no longer seen as little more than a reinforcement for oral language instruction. One major advantage of reading, as argued by Chastain (1988), is that language learners can have control over the speed at which they read. A second benefit of reading is that learners can read in their own privacy. This is an important psychological factor for learners who are worried about reciting in front of their peers. Moreover, lack of exposure to the spoken mode of language—especially in a situation such as Iran, where English has got the status of a foreign language in terms of Stern's (1983) categorization—often causes foreign-language learners to resort to the printed form of language, to reading texts, as a compensation for such a shortage.

The present study has investigated the impact of a couple of "generative study strategies"--that is, summarization and question-generation--on a group of EFL learners' comprehension and recall of short stories in the framework of the model of generative learning, originally proposed, investigated, and elaborated on, by Wittrock (1974, 1983, 1985, 1990, 1991, 1992).

Developing a written summary of paragraphs, passages, and longer pieces of discourse, in which key concepts or points are included but less important details are left out, is considered a generative learning strategy by scholars (cf. McGriff, 2001; Wittrock & Alesandrini, 1990). Researchers have long argued that meaningful learning occurs when the learner actively constructs a knowledge representation of information in his/her working memory (Ausubel, 1968; Wittrock, 1990). Friend (2000, p. 1) maintains that "Doing summaries reinforces connections among the new ideas students must learn and creates connections between new ideas and prior knowledge." She adds that "summarization is very hard for students to pick up on their own, but it can be taught directly. Many students appreciate strategy instruction that makes summarization less mysterious" (ibid.). According to the Report of the National Reading Panel (2002), to summarize a text involves: sequencing of events, making judgments, noting details, making generalizations, and using story structure or text organization. "Direct instruction in distinguishing important information from unimportant information may be needed to assist the large number of learners who do not demonstrate proficiency in this academically relevant activity" (Garner, 1984, p. 304). Moreover, a summary must capture the gist of a piece of written material and reduce it substantially (King, 1992). With regard to this last point, Garner (1984) warns:

If students cannot distinguish what is important from what is unimportant in texts, they will study inefficiently. They will fail to process language in an intentionally selective manner, and most certainly will commit studying blunders such as taking notes on peripheral as well as central information and underlining excessively. (p. 304)

## 2. Research Questions

The major research questions of the study are:

1. Do summarization and question-generation as two generative study strategies bring about any variation in EFL learners' **reading comprehension achievement** of literary prose texts?
2. Do summarization and question-generation as two generative study strategies bring about any variation in EFL learners' **recall** of literary prose texts?

## 3. Research Hypotheses

On the basis of the research questions, the following null hypotheses were formulated as the major hunches of the study:

**H<sub>0</sub> (1):** Applying summarization and question-generation as two generative study strategies by EFL learners in reading literary prose texts has no effect on their **reading comprehension achievement** of such texts.

**H<sub>0</sub> (2):** Applying summarization and question-generation as two generative study strategies by EFL learners in reading literary prose texts has no effect on their recall of such texts.

## 4. Method

### 4.1 Participants

Three groups of undergraduate senior EFL males and females (N=63), majoring in English literature at Sabzevar Teacher Training University (STTU), Khorasan, Iran, participated in this study. They were randomly assigned to attend a short-story course in three different sections, all taught by the same instructor.

**4.2 Materials and Procedure**

As part of the course materials, three short stories were selected as the materials for the research project: Oscar Wilde's "The nightingale and the rose" and James Joyce's "Araby" and "Eveline". After randomly assigning the participants to three equal groups (each group consisting of 21 students of both males and females)—namely, the summarization group (A), the question-generation group (B), and the control group (C), the two experimental groups (i.e., the summarization (A) and the question-generation (B) groups) were instructed by the teacher how to perform their tasks, respectively. The summarization group was told to reduce each short story to a few sentences, merely including the major events and points of the story. The question-generation group was instructed how to spot the major information in each short story and then generate questions addressing the major events, characters, and points included in the story. The control group was not asked to apply any special generative study strategy, however.

- After the instructor presented each of the short stories to the three sections separately, the two experimental groups were asked to perform their assigned tasks (summarizing the content of the stories in their own words or generating their own questions out of the stories). The control group, of course, was not asked to perform any certain task to deal with the stories.
- One week after the presentation of the short stories and collecting the summaries and questions produced by the two experimental groups, all the participants were asked to take a reading comprehension, multiple-choice, achievement test developed by the researcher on the content of the stories in question. It should be mentioned that the students were given a few extracts from each story, followed by one comprehension question (or more than one, if the extract was long enough to yield more questions) and were asked to choose the right answer from among the four alternatives related to each question.

**5. Results**

**5.1 Results of the reading comprehension test**

As it was mentioned earlier, the three groups of the participants were given a reading comprehension test one week after the two short stories had been presented to them by the researcher and they had engaged with the texts, applying either the study strategies they had been assigned to (in the case of the two experimental groups) or merely applying their own personal learning strategies (as to the control group). Having scored the test papers, the researcher computed **the arithmetic mean** (or simply, the mean) for each group (see Table 1, below). Then, in order to compare the means, a one-way ANOVA test of significance was run to see if the means were different and if the differences were significant (see Table 2, below).

**Table 1. Results of the reading comprehension test for the three groups**

Group	N	Mean	SD
A (summarization)	21	<b>32.524</b>	2.421
B (question-generation)	21	<b>30.048</b>	3.217
C (control)	21	<b>28.095</b>	4.878

**Table 2. Reading comprehension test**

**One-Way Analysis of Variance**

Source	DF	SS	MS	F	P (or $\alpha$ )
Factor	2	206.9	103.4	<b>7.76</b>	0.05
Error	60	800.0	13.3		
Total	62	1006.9			

**5.2 Results of the recall test**

Two weeks after presentation of the couple of stories to the three groups of participant, a recall test of multiple-choice format was administered in order to compare the three groups with regard to remembering the content of the stories. The mean score of recall for each group was separately calculated (see Table 3, below). Then, for the comparison of the obtained means, a one-way ANOVA test of significance was run (see Table 4, below)

**Table 3**

**Results of the recall test for the three groups**

Group	N	Mean	SD
A (summarization)	21	<b>27.333</b>	2.221
B (question-generation)	21	<b>24.524</b>	2.857
C (control)	21	<b>23.857</b>	3.719

**Table 4: Recall test**

**One-Way Analysis of Variance**

Source	DF	SS	MS	F	P (or $\alpha$ )
Factor	2	142.95	71.48	<b>7.96</b>	0.05
Error	60	538.48	8.97		
Total	62	681.43			

## 6. Discussion and conclusion

In the Introduction, as to the probable outcome of the study, two null hypotheses were proposed: the first suggesting that the two generative study strategies of summarization and question-generation have no effect upon EFL learners' reading comprehension, and the second predicting that these strategies have no impact on their recall of literary texts.

The obtained mean scores by each of the three groups on the reading comprehension test indicated that the summarizers obtained a higher mean than the question-generation group, who in turn outperformed the control group. By setting  $\alpha$  (the p value) equal to 0.05, according to the table of the F distribution, the critical value of F would be equal to 3.15 (i.e.,  $F_{.05}(2, 60)=3.15$ ), while our obtained F is equal to 7.76 (see Table 2, above). Therefore, as the obtained value of F exceeds its critical value, we can reject the null hypothesis, denoting that applying generative study strategies of summarization and question-generation by EFL learners would positively influence their reading comprehension.

In a similar manner, the second null hypothesis is also rejected. The results of the one-way ANOVA in Table 4 indicate that with the critical value of F being equal to 3.15 and the obtained value of F equal to 7.96, the null hypothesis, claiming that the use of generative study strategies of summarization and question-generation by EFL learners would have no effect upon their recall of literary texts, is not true. The rejection of the null hypothesis, in this case, suggests that the application of the strategies in question does enhance EFL learners' recall of short stories.

To conclude the discussion, the results indicate that, in line with the previous research reports, the use of summarization and question-generation by EFL learners enhances both their reading comprehension and recall of literary prose texts. Moreover, if we compare the effect of the two strategies in question, the results show that summarization seems to be slightly more effective than question-generation in the enhancement of both reading comprehension achievement and the amount of recalling the content of literary texts by learners of English as a foreign language.

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