
University Press.
References


groups could not be rejected.

Additionally, in the last and third contrast the difference between the mean scores of the Summarizing and the Self-questioning groups was not significant. As a result, the third null-hypothesis as no statistically significant difference between the summarizing and the self-questioning groups could not be rejected, as well.

**Conclusion**

According to the results of this study, it can be cogently concluded that assigning students to summarize the text influences their reading comprehension positively. Summarizing strategy provides students with something to do after reading and enhances interest and recall on the part of students. Moreover, teachers can make use of different strategies as teaching devices in their classroom or employ inferential questions to give the opportunity to the students to express their own views and be active in the class.

Teachers can make use of different strategies as teaching devices in their classroom. Using strategies creates new situations for the students and makes learning more interesting. These strategies would help students to use their reading ability to solve problems. Besides, students would feel responsible for their learning.
In last step, in order to find out which group means differed significantly from each other a post-hoc Scheffe test was conducted for the pair-wise comparisons. The results are presented on the table below:

### The Post-hoc Scheffe Test

<table>
<thead>
<tr>
<th>Comparisons</th>
<th>Observed Difference</th>
<th>Critical Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summarizing Control</td>
<td>X = 38.21</td>
<td>3.46</td>
</tr>
<tr>
<td>Summarizing Self-questioning</td>
<td>X = 38.21</td>
<td>1.93</td>
</tr>
<tr>
<td>Self-questioning Control</td>
<td>X = 36.28</td>
<td>1.53</td>
</tr>
</tbody>
</table>

*Denotes significant difference at .05 level.*

As represented in the table, there was only one statistically significant difference among the three comparisons. The Summarizing group, whose mean score was (38.21), outperformed the control group on the post-test. Thus, the first null-hypothesis as no significant difference between the Summarizing and Control groups' mean scores was rejected, so teaching the subjects through the summarizing technique had a statistically significant impact on their performance on the post-test. The other two contrasts were not significant. In the second contrast the difference between self-questioning and control groups' mean scores was not significant. So it was concluded that the second null hypothesis as no statistically significant difference between the mean scores of the two
and experimental groups in order to find out the probable differences between the performances of the three groups after the treatment. Then a one-way ANOVA was run to compare the mean scores of the subjects on the post-test. The following table reveals the results:

**One-way ANOVA, Post-test by Groups**

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>D.F.</th>
<th>Mean Square</th>
<th>F observed</th>
<th>F critical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>247.49</td>
<td>2</td>
<td>123.74</td>
<td>3.89</td>
<td>3.07</td>
</tr>
<tr>
<td>Within Groups</td>
<td>3937.81</td>
<td>124</td>
<td>31.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4185.30</td>
<td>126</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results revealed that F observed (3.89) at 2 and 124 degrees of freedom were greater than the critical F (3.07). Thus, it was concluded that there were significant differences among the means of the three groups on the post-test and the treatments that the experimental groups received during the semester had proven to be effective.

**Descriptive Statistics, Post-test**

<table>
<thead>
<tr>
<th>Groups</th>
<th>Mean</th>
<th>Std Dev</th>
<th>Min</th>
<th>Max</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>34.75</td>
<td>5.25</td>
<td>24</td>
<td>49</td>
<td>40</td>
</tr>
<tr>
<td>Summarizing</td>
<td>38.21</td>
<td>6.06</td>
<td>24</td>
<td>52</td>
<td>42</td>
</tr>
<tr>
<td>Self-questioning</td>
<td>36.28</td>
<td>5.54</td>
<td>26</td>
<td>51</td>
<td>45</td>
</tr>
</tbody>
</table>
Readability indices of the some of the passages in the treatment phase

Descriptive Statistics, Pre-test

<table>
<thead>
<tr>
<th>Groups</th>
<th>Mean</th>
<th>Std Dev</th>
<th>Min</th>
<th>Max</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>31.67</td>
<td>3.04</td>
<td>26</td>
<td>37</td>
<td>40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Readability Indices</th>
<th>Reading Passages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Summarizing</td>
<td>30.97</td>
</tr>
<tr>
<td>Self-questioning</td>
<td>31.75</td>
</tr>
</tbody>
</table>

One-way ANOVA Pre-test by Groups

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>D.F.</th>
<th>Mean Square</th>
<th>F observed</th>
<th>F critical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>15.59</td>
<td>2</td>
<td>7.79</td>
<td>.42</td>
<td>3.07</td>
</tr>
<tr>
<td>Within Groups</td>
<td>2276.06</td>
<td>124</td>
<td>18.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2291.65</td>
<td>126</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Since the F observed value (0.42) at 2 and 124 degrees of freedom did not exceed the critical F value (3.07), it was concluded that there were not any significant differences among the means of the three groups on the pre-test.

At the end of the study, a teacher-made test was given to the control
Statistical Procedure

As it was mentioned earlier, three passages were used for the pre-test and nine passages were used for the post-test. The pre-test and post-test passages were selected to have approximately the same readability indices as the passages used in treatment phase. In order to check the readability level of these passages, the Fog’s Readability Formula was employed. Following tables display the readability indices of the passages.

**Readability Indices of the 3 Reading Passages of the Pre-test**

<table>
<thead>
<tr>
<th>Readability Indices</th>
<th>Reading Passages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>6.6</td>
</tr>
</tbody>
</table>

**Readability Indices of the 9 Reading Passages of the Post-test**

<table>
<thead>
<tr>
<th>Readability Indices</th>
<th>Reading Passages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>6.9</td>
</tr>
</tbody>
</table>
choice comprehension questions. In order to standardize the test, it was administered to a group of 40 students similar to the groups of this study through a pilot study. In addition to computation of the readability of the passages, the process of item analysis was performed to determine the characteristics of individual items and the reliability was computed by Cronbach’s alpha. The reliability estimate was 0.89.

Design

The present study was implemented on the basis of a quasi experimental design due to the fact that randomization was not feasible and intact groups were dealt with. The major goal of such a design was to determine whether there exists any statistically significant difference between improving reading comprehension ability of learners who practiced the aforementioned strategies and those who did not.

Data Analysis

At this stage, the statistical findings were analyzed and interpreted in order to find out whether the treatment produced any statistically significant impact on improving the reading comprehension ability of the experimental groups. To accept or reject the stated null hypotheses, the scores from both pre-test and post-test were analyzed in different steps. The ANOVA was pre-test and post-test means of control and experimental groups simultaneously, in order to identify whether any statistically significant differences could be observed to be the basis for drawing conclusions. Furthermore, a Scheffe test was used to check the validity of the results of ANOVA.
significant difference between the subjects on the pre-test. Consequently, one class with 40 subjects was considered as the control group and the other two classes with 42 and 45 subjects as the experimental groups.

After the pre-test the three groups were instructed two sessions a week, each session 90 minutes. The treatment took 30 sessions during which students were involved in reading passages and working on them in different ways. The subjects in the control group read the material silently after the explanation of the key words and aloud reading of the passage by the teacher. The teacher asked comprehension questions. The subjects used scanning and skimming strategies in answering the questions. Besides, they were supposed to have discussions on the topics. However, the subjects in the experimental groups, instead of scanning and skimming and oral discussion, were supposed to summarize the passages or generate questions as reading strategies. One of the groups was asked to write a summary of the main and minor ideas in the text and submit them to the teacher. Through this procedure the teacher could check the students’ knowledge about the text. Similarly, the subjects in the other experimental group read the text and generated questions on the topics. This group was asked to write as many questions of any kind on the main idea and the minor ideas in the text. The focus was on recognition of the main idea and specific pieces of information in both of the experimental groups.

In the post-test phase, the newly developed comprehension test, which was adapted from four different versions of (CELT), was administered to the three groups. The test was a reading comprehension test which consisted of nine reading comprehension passages followed by multiple
Instrumentation
The following instruments were utilized in this study:
1. A comprehensive English language test (CELT) that measured and determined the subjects’ level of general English language proficiency and checked the homogeneity of subjects’ reading comprehension ability.
2. A newly developed standardized comprehension test, which was adopted from four different versions of (CELT) administered to subjects as a post-test.

Procedure
The procedures followed in this study were conducted in three main phases, which consisted of administering the pre-test, the treatment, and the post-test. In the pre-test phase, in order to examine the homogeneity of the students, a Comprehensive English Language Test (CELT) was administered. This test which was taken by 127 subjects of the study, consisted of 90 multiple choice items (30 vocabulary items, 45 grammar items, and 15 reading comprehension items).

However, prior to the pre-test phase, a pilot study was conducted to estimate the reliability of the test. 40 students took the test. The readability of the passages was calculated in order to match with the readability of the texts which students studied during their class time. Besides, the process of item analysis was performed to determine the characteristics of individual items and based on the results poor items were discarded. Subsequently, the reliability of the test was computed through Cronbach’s alpha and the reliability estimate was 0.69.

The results of this test showed that there was no statistically
HO₂: "Self-questioning does not have any statistically significant impact on improving Iranian EFL learners' reading comprehension ability."

HO₃: "There is no statistically significant difference between those EFL learners who summarize the text and make comprehension questions while reading and those who do not."

METHOD
Subjects

A total of 127 female Iranian junior university students majoring in English Language Translation in Islamic Azad University at Garmshar, participated in this study. The subjects were assumed to be able to summarize the reading texts or to make comprehension questions while reading because of having passed two courses of reading (reading one and two) before.

The subjects were administered a comprehensive English language test (CELT) and those students who had scored one standard deviation above and below the mean were considered as the subjects of the study. Each group included different numbers of students, who were assigned into one control group, one experimental group of summarizing and one experimental group of self-questioning. The three groups were homogenous in that they were typical Iranian second-year university students who had studied English through formal instruction in an EFL environment.
regular reading instruction. Therefore, the present study was aimed at exploring the possible effect of student's efforts to summarize and make comprehension questions on their better understanding of the reading texts. It was presumed that summarizing the reading texts or making comprehension questions instead of answering them could direct the attention of the learners to the major ideas of the texts and hence prove to be better strategies for teaching reading comprehension.

Research Questions

Considering the purpose of the present study, the following research questions were proposed:

1. Does the use of summarizing and making comprehension questions while reading have any statistically significant impact on improving Iranian EFL learners' reading comprehension ability?
2. Is there any statistically significant difference between those EFL learners who summarize the text while reading and those who do not?
3. Is there any statistically significant difference between those EFL learners who make comprehension questions while reading and those who do not?

Null hypotheses

Based on the above research questions, the following null hypotheses were formulated:

HO₁: "Summarizing does not have any statistically significant impact on improving Iranian EFL learners' reading comprehension ability."
for the question generation, Raphael and her colleagues were able to help
students develop a sense of efficacy and confidence in their ability to
differentiate strategies in both responding to and generating their own
questions for the text. They showed that when students learn to generate
questions for the text, their overall comprehension improves. Also when
Question-generation strategy is implemented in classrooms, it is probably
better to use it not as a steady routine repeated religiously for every text
encountered, but as an activity that is regularly but intermittently
scheduled into guided or shared reading.

Statement of the Problem
In recent years, specialists in the field of language teaching have focused
on cognitive and meta-cognitive strategies that can increase students’
comprehension and learning of academic subject matters from written
texts. Numerous studies (Carrell, 1998; McNeil and Donant, 1992; Block
1986; Pearson et al., 1992) have examined the effectiveness of various
studying techniques, i.e. reading strategies, such as underlining, note
taking, summarizing, questioning and answering, outlining and
elaborating. The motive behind utilizing these strategies has been to help
learners in the process of reading comprehension.
In order to investigate the impact of reading strategies on reading
comprehension ability of EFL learners, two while-reading strategies
namely summarizing and question - making were chosen. In order to
achieve the purpose of the study, reading comprehension ability of a
group of students making comprehension questions and summarizing as
while-reading strategies was compared with that of a group undergoing
“Often confused with determining importance, summarizing is a broader, more synthetic activity for which determining importance is a necessary, but not sufficient, condition. The ability to summarize information requires readers to sift through large units of text, differentiate important from unimportant ideas, and then synthesize those ideas and create a new coherent text that stands for, by substantive criteria, the original. This sounds difficult, and the research demonstrates that, in fact, it is.” (p. 244).

Instruction and practice in summarizing not only improve students' ability to summarize texts, but also increase their overall comprehension of text content. The ability to summarize information is an essential skill in reading. As Stotesbury (1990) stated, summarizing entails the reduction of a text to its essential constituents which means that students have to be able to grasp the overall structure of a text and be able to distinguish the major issues from the minor ones.

**Self-Questioning**

Self-questioning during reading is a strategy which actively monitors comprehension. When readers detect a comprehension failure, they should use a "fix-up strategy". While the impact of questions on comprehension is important, the more interesting questions are (a) whether students can learn to generate their own questions of the text and (b) what impact this more generative behaviour might have on subsequent comprehension (Raphael and Pearson, 1985; Raphael and Wonacutt, 1985).

Through a model of giving students ever-increasing responsibility
understanding happens. The basic idea behind the comprehension category is to understand the material and not just to memorize it because memorization may not involve understanding. Consequently, a comprehension-level question requires active participation by the student. The student should somehow process or manipulate the response so as to make it more than simple recall.

Pressly and Afflerbach (1995) stated that skilled readers know and use many different strategies in coming to terms with text. They proceed generally from front to back of documents when reading. Good readers are selectively attentive. They sometimes make notes, predict, paraphrase, and back up when confused. They try to make inferences to fill in the gaps in the text and in their understanding of what they have read. Good readers intentionally attempt to integrate across the text. They do not settle for literal meanings but rather interpret what they have read, sometimes constructing images, and other times identifying categories of information in the text, and on still other occasions engaging in arguments with themselves about what a reading might mean. After making their way through the text, they have a variety of ways of firming up their understanding and memory of the messages in the text, from explicitly attempting to summarize to self-questioning about the text to rereading and reflecting. The many strategies used by skilled readers are appropriately and opportunistically coordinated with the reader using the processes needed to meet current reading goals.

**Summarizing**

Dole et al. (1991) described summarizing as follows:
guesses about the meanings of unknown words, skipping unknown words, tolerating ambiguity, making predictions, confirming or disconfirming inferences, identifying the main idea, rereading, and using cognates to comprehend, to more recently recognized strategies such as activating prior background knowledge, generating questions, and recognizing text structure.

Brown et al. (1994) believe that clarifying the purpose of reading; activating relevant background knowledge; allocating attention and focusing on the major content, critical evaluation of content, monitoring ongoing activities, and drawing and testing inferences provide the basis for the reader's knowledge of strategies. Uses of these activities which are included in various intervention programmes permit the students to regulate their reading so as to improve comprehension. According to Ross (1999) reading has several different and independent underlying factors. He points out that through factor analysis, either one broad factor, or at most two factors including inferential reading comprehension and vocabulary can be identified. In sum, most studies support the multiple factor view of reading.

Cornoldi and Oakhill (2001) asserted that reading is a highly complex interplay of cognitive processes including attention, pattern recognition, memory, knowledge, reasoning, and problem solving.

Orlich et al. (1994) define comprehension as a constituent that involves transforming information into more understandable forms. This means that for comprehension to take place, the information, which has already been stored, should be processed in the mind in a way that
enjoyment (Lynch and Hudson, 1991).

**Review of the Related Literature**

There are many different definitions for reading comprehension. However, the nature of the process of reading is not exactly known. In the study of English, reading has often been at the center of debate among teachers and scholars. Theories about reading and numerous teaching techniques have created an awareness of the influence reading has on listening, speaking, writing, and even translating. According to Sheng (2000) reading is the process of recognition, interpretation, and perception of written or printed materials. In other words it is the process of perceiving a written text in order to understand its contents.

Grellet (1991) believes that reading is an activity involving constant guesses that are later rejected or confirmed. This means that one does not read all the sentences in the same way, but one relies on a number of words- or ‘cues’- to get an idea of what kind of sentence (e.g. an explanation) is likely to follow. Carrel (1991) claims that the first process in reading is word recognition and the essential skill in reading is getting meaning from a written passage. Moreover, he believes that reading strategies are of interest not only for what they reveal about the ways readers manage their interactions with written text, but also for how the use of strategies is related to effective reading comprehension. Additionally, reading strategies run the gamut from such traditionally recognized reading behaviours as skimming a text to get the general idea, scanning a text for a specific piece of information, making contextual
were required to read the material and generate questions and the experimental group of summarizing were supposed to read the texts and write a summary, the subjects in the control group were asked to read the materials and use some other reading strategies.

At the end of the term, a newly developed reliable test was administered to determine the influence of the treatments on the groups. The results signified that self-questioning did not have much impact on improvement of students’ reading comprehension ability, while summarizing affected their reading comprehension ability. Therefore, it was concluded that using summarizing in teaching reading could have positive effects on reading comprehension ability of EFL learners.

Key Words: Reading comprehension ability, Reading strategies, Text, Summarizing, Self-questioning

Introduction

One of the uses of language is reading materials and getting information. Reading opens door to an exciting world for any person, a world of shared adventure and humour, a world of information and amazing facts, and a world of thoughts and beauty. Obviously, reading is the most important activity in any language class, not only as a source of information, but also as a means of consolidating and extending one’s knowledge of the language. The goal of reading is to read for meaning or to recreate the writer’s meaning. However, the ability to read another language with direct comprehension and with fluency should be cultivated in progressive stages, and practiced at first with carefully selected material, in order to enable students to read with ease and
The impact of summarizing & self-questioning on the improvement of iranian efl learners’ reading

Comprehension ability

Mojgan Rashtchi
Nooshin Nami

ABSTRACT

The ability to read is acknowledged to be the most stable and durable of the foreign language modalities. Learners may use productive skills, yet still be able to comprehend texts with some degree of proficiency. Reading, whether in second or foreign language context, involves the reader, the text, and the interaction between the reader and text (Bernhardt, 1991).

The present study was aimed at exploring whether summarizing the text and making comprehension questions had any statistically significant impact on the improvement of Iranian EFL learners’ reading comprehension ability or not and if they had, which one was more effective - summarizing or self-questioning.

In order to arrive at a logical answer to the aforementioned problems 127 university students were chosen from a pool of 160 students majoring in English Language Translation in Islamic Azad University at Garmsar. Three homogenized groups of students, who were taking a Reading course, participated as the subjects in one control and two experimental groups. While the subjects in the experimental group of self-questioning

* Islamic Azad University, North Tehran
* Islamic Azad University, North Tehran