

# **The Effect of Pre-reading Strategies on the Reading Comprehension of Iranian EFL Learners at Different Levels of Reading Proficiency**

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## **ABSTRACT**

This study was conducted to investigate the effect of some pre-reading strategies (i.e., vocabulary introduction, pre-reading summary, anticipation guide, pre-passage signpost fact questions, and K-W chart) on the reading comprehension of Iranian EFL learners at the two different levels of low and high reading proficiency. The main finding of the study was that all the five pre-reading strategies affect the reading comprehension of the students. Furthermore, it was found that there is a relationship between reading proficiency level and Iranian EFL students' comprehension of passages with those pre-reading strategies. Also, it was concluded that the students in the low proficiency level group were the most successful with the passages having vocabulary practice, a strategy which activates the linguistic schema of the students. However, as for the comprehension of passages with the other four pre-reading strategies, the high

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proficiency level students outperformed the low proficiency level group.

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**Key Words:** 1. Pre-reading Strategies, 2. Anticipation Guide, 3. Pre-passage Signpost Fact Questions, 4. K-W Chart, 5. Linguistic Schema

## ***1. Introduction***

### **1.1. Background**

Reading plays an important role in education. Not only do students need a lot of reading in the process of learning, but they also have to use their capacity to read fluently as an indicator of more general intellectual ability. In fact, reading is one of the attributes of literacy.

The reading text is not an all-important factor in the process of comprehension. As a matter of fact, readers' background knowledge also plays a significant role. This means that reading should be done beyond the confines of the text out into the world, and there should be a kind of interaction between the previous knowledge of the reader and his understandings of the text. Day and Bamford (1998) consider "the reader's prior knowledge of the language, of the world, of text types, and of the topic" (p. 14) to be of great importance in comprehension and recall in the process of building meaning out of the written text.

In order to read with comprehension, both bottom-up processing focusing on reading as a decoding phenomenon and top-down processing emphasizing the importance of readers' background knowledge on the topic of the text should be deployed. Mikulecky (1990) holds that one of the requirements which students need to possess to read effectively is learning how to tap their background knowledge in order to better employ top-down processing. Mikulecky

further states that many students, especially ESL/EFL students, rely mainly on bottom-up processing, primarily at the word and sentence levels, when they read. Mikuleky also refers to Coady (1979) as stressing the need for training students in top-down, conceptually-driven processing. As a matter of fact, the introduction of reading as an integration of top-down processes, utilizing schema and prior knowledge of the readers, as well as bottom-up processes, which are text-driven, has changed our view of reading as a decoding process (Carrell & Eisterhold, 1988 as cited in Richards, 1990). In this regard, Day and Bamford (1998) also state that schema theory, based on which readers require an organized set of “vocabulary knowledge, world knowledge, linguistics knowledge, and so on” (p. 14) in order to reconstruct the meaning of the written message, plays a great role in the comprehension process.

There are many types of schemata. Carrell (1987) makes a distinction between content schemata and formal schemata, defining the former as the reader’s background knowledge related to the content of the text and the latter as the knowledge related to the rhetorical and formal structures of the text to be read. Carrell also indicates, based on a research done on these two types of schemata, that content schemata influences reading comprehension more than formal schemata and that content is more important than form in the process of reading comprehension. Aebersold and Field (1997) also introduce another type of schemata, namely, linguistic schemata, which is the knowledge of language at word level, despite its formal counterpart which is the knowledge of language at discourse level.

Activating readers’ schemata has a positive effect on their comprehension. Based on a research done by Guyotte (1997, as cited in Nunan, 1999), activities and tasks aimed at building schema, performed before reading as pre-reading activities, will facilitate and

enhance students' comprehension of a text. In fact, the importance of applying pre-reading strategies for foreign language readers whose world knowledge often far exceeds their linguistic skills has been recognized by many researchers such as Greenwood (1988), Grabe and Stoller (2002), Chastain (1988), Dubin and Bycina (1991), Hedge (1985), Taglieber, Johnson, and Yarbrough (1988), Aebersold and Field (1997), and many others. They believe that such metacognitive strategies provide the students with the required background knowledge (activating either linguistic, content or formal schemata or all of them), provide a need to read, make the students interested in the topic, foster their expectations of the content of the text, motivate the students, and make reading more purposeful.

The level of proficiency also affects the use of bottom-up or top-down strategies by the readers (Carrell, 1989 as cited in Swaffter, Arens, & Byrnes, 1991). In this regard, Benedetto (1985) and Hosenfeld (1997) as cited in swaffter et al. (1991) find out that using reading strategies consciously has a positive correlation with the performance of the readers at intermediate and advanced levels of proficiency. Finally, Aebersold and Field (1997) discuss the significance of distinguishing pre-reading strategies for low and high levels of foreign language proficiency, and note that students at the low level of proficiency need more practice with language and content of the reading beforehand more than the high proficiency level group.

Therefore, the present study was conducted to investigate the effect of some pre-reading strategies (i.e., vocabulary introduction, pre-reading summary, anticipation guide, pre-passage questions, and K-W chart) on the reading comprehension of Iranian EFL learners at the two different levels of low and high reading proficiency.

The new vocabularies in this study were introduced through a vocabulary checklist proposed by Robertshaw, Hamblen, and Feldman

(1990). The anticipation guide as a pre-reading strategy can be defined as a set of sentences, which represents important points or controversial ideas. Students consider each statement, then decide if they agree with it or not. Next, they are asked to give their rationale for their answers. The pre-passage questions used in this study were signpost fact questions, which had been directly taken from the upcoming passage. Finally, the chart known as the K-W chart used in this study was a two-column chart in which the students indicated what they already knew about the topic of the passage, and what they wanted to know from the text. Thus, in this chart, K stands for know and W for want to know.

## **1.2. Reading Proficiency**

In order to read with comprehension, students not only need to develop their language proficiency, but they have to enrich their reading proficiency as well. Reading proficiency is defined as the ability of the students to have a general understanding of the text, interpret it in their minds, connect the information of the text with their background knowledge, and have a critical evaluation of the idea (White, 2003). Reading proficiency has been regarded as a determining factor for students' success in all fields. While discussing such a significant skill, Melnik and Merritt (1972) claim that reading proficiency is "the royal road to knowledge" (p. 67) which guarantees success in all academic subjects.

Students at different proficiency levels have different deficiencies and varied needs in reading comprehension. Cashdan (1986) claims that students with low proficiency in reading have their main difficulties over the letters and words. In this regard, Carrell and Eisterhold (1988) also note that

Less proficient students tend to have vocabulary acquisition emphasized and, as such, are encouraged to do a lot of specific (and less efficient) word-by-word processing exclusively in a bottom-up processing mode. Readers who are more proficient in a language tend to receive content previews because they are no longer as susceptible to vocabulary and structure difficulties in reading. As a result, these more proficient students are encouraged to do more global, predictive (and more efficient) processing in the top-down processing mode. (p. 228)

Some scholars believe that language proficiency and reading proficiency are related, but there are some who argue that reading proficiency level does not solely depend on language proficiency level. Block (1986) refers to some researchers (e.g. Clark, 1979; Cziko, 1980; Macnamara, 1970) arguing that reading proficiency in a language depends on language proficiency in that language and that language skills move linearly from lower-level skills, i.e., letter and word level, to higher level cognitive skills. Block (1986) further refers to another group of researchers (such as Benedetto, 1984; Coady, 1979; Cummins, 1980; Goodman, 1973; Hudson, 1982) as claiming that that cognitive strategies (such as those used in reading comprehension) develop throughout the process of language proficiency and that higher level strategies can function alongside lower level strategies. In this regard, Auerbach and Paxton (1997) also state that second language reading proficiency does not solely depend on language proficiency (such as syntax and vocabulary) but on the use of strategies related to effective reading.

### **1.3. Null Hypotheses**

Ten null hypotheses were proposed for the study. They were as follows:

Vocabulary introduction as a pre-reading strategy does not affect the reading comprehension of Iranian EFL learners.

Text summary as a pre-reading strategy does not affect the reading comprehension of Iranian EFL learners.

Anticipation guide as a pre-reading strategy does not affect the reading comprehension of Iranian EFL learners.

Pre-passage questions as a pre-reading strategy do not affect the reading comprehension of Iranian EFL learners.

K-W chart as a pre-reading strategy does not affect the reading comprehension of Iranian EFL learners.

There is no relationship between reading proficiency level (i.e., low and high) and Iranian EFL learners' comprehension of passages with vocabulary introduction as a pre-reading strategy.

There is no relationship between reading proficiency level (i.e., low and high) and Iranian EFL learners' comprehension of passages with text summary as a pre-reading strategy.

There is no relationship between reading proficiency level (i.e., low and high) and Iranian EFL learners' comprehension of passages with anticipation guide as a pre-reading strategy.

There is no relationship between reading proficiency level (i.e., low and high) and Iranian EFL learners' comprehension of passages with pre-passage questions as a pre-reading strategy.

10. There is no relationship between reading proficiency level (i.e., low and high) and Iranian EFL learners' comprehension of passages with K-W chart as a pre-reading strategy.

## **2. Method**

### **2.1. Participants**

The participants of this study were all from Allameh Tabataba'i University. From among 122 students participating in the first phase

of the study, i.e., those who took part in the language proficiency test, as well as the reading proficiency test, 62 students provided the necessary data for the experiment. All the subjects were majoring either in English literature or English translation, and they were selected from all the four groups of freshman, sophomore, junior, and senior students. The study was carried out during the winter-spring semester, 2003.

## **2.2. Instruments**

In order to carry out the study, five tests were administered:

The first was the Comprehensive English Language Test (CELT), used as a means of placing the students into the two groups of low and high language proficiency levels. The test consisted of two subsets of grammar and vocabulary, each comprising 75 items.

The second test was a reading proficiency test, compiled from a TOEFL battery by Eslami (1999), and validated with undergraduate students. This reading proficiency test had a correlation of .92 with the already used language proficiency test (i.e., CELT). The reading test consisted of three passages, which contained 19 multiple choice items. The purpose of administering this reading proficiency test was to check the reading proficiency level of those students whose level of language proficiency was already determined and to select those students whose language proficiency levels matched their reading proficiency levels.

The third test was the Level C of Nelson Reading Comprehension Test, which consisted of five passages followed by 38 multiple choice items. This test had already been validated and proved a high correlation with the Comprehensive English Language Test (CELT) (Ahmadian, 1998). The test was used as a criterion for validating the

two reading comprehension tests used for the final phase of the study (i.e., the fourth and fifth instruments).

Finally, two reading comprehension tests, each comprising five passages were selected from the reading sections of different TOEFL batteries, and for each of the passages in the five-passage test, a pre-reading strategy was developed. These pre-reading strategies consisted of vocabulary introduction, pre-reading summary, anticipation guide, pre-passage fact questions, and K-W chart. In the first validation process, the first five-passage reading test was concurrently validated using an already validated test of reading proficiency (i.e., Level C of Nelson Reading Comprehension Test, which was the third instrument) and a correlation of .89 was found between them. The second five-passage reading test was validated using the same instrument (i.e., level C of Nelson Reading Comprehension Test), resulting in a correlation of .85.

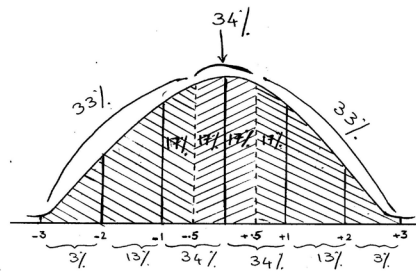
### **2.3. Procedure**

In the first session of the classes in the winter-spring semester, 2003, the Comprehensive English Language Test (CELT) was administered to 122 undergraduate students majoring either in English literature or English translation, in Allameh Tabataba'i University.

Two sessions later, after a two-week interval, the same students took a three-passage reading proficiency test, compiled from a TOEFL battery. The correlational analysis showed that there was a high correlation (i.e., .92) between the reading proficiency test and the Comprehensive English Language Test (CELT). From among 122 participants, 30 students whose scores in these two tests were half a standard deviation below the mean and 32 students whose scores in these tests were half a standard deviation above the mean, were respectively put in the two groups of low and high proficiency levels,

since based on the normal distribution as shown in figure 1, the scores in half a standard deviation below and above the mean, each comprises 33% of the whole distribution, and 34% remains in between for those students whose scores are in the middle. Of course, the study only concentrated on the low and high proficiency level groups.

*Figure 1. Normal distribution curve for the low and high proficiency level groups.*



After placing the students into the two groups of low and high proficiency levels, two reading comprehension tests each comprising five passages were selected from the reading section of different TOEFL batteries. Both of the two reading comprehension tests were administered to a similar group of subjects and were concurrently validated using an already validated reading proficiency test (i.e., Level C of Nelson Reading Comprehension Test) with correlations of .89 and .85, respectively. The rationale behind the choice of Level C of Nelson Reading Comprehension Test was the fact that this test had been used by Ahmadian (1998) and had shown a high correlation with the Comprehensive English Language Test.

Finally, for each and every passage in both reading tests, a pre-reading strategy was provided and handed to the 62 students in the low and high proficiency level groups, in separate handouts, along with the passages in the last two sessions of the classes. On the whole, there were ten passages and each pair had a single form of pre-reading strategy. The five pre-reading strategies devised for these passages were vocabulary introduction, pre-reading summary, anticipation guide, pre-passage questions, and K-W chart.

#### **2.4. Design**

The study consisted of two independent variables, that is, reading proficiency level, the moderator variable, with the two levels of low and high, and pre-reading strategies with five different levels of vocabulary introduction, pre-reading summary, anticipation guide, pre-passage questions, and K-W chart, and a dependent variable, which was reading comprehension. The design of the study was factorial and one group pretest posttest pre-experimental. Since there were two independent variables and a dependent variable, a two-way ANOVA was conducted. This analysis was done to see whether the afore-mentioned pre-reading strategies, reading proficiency levels, and/or the interaction of reading proficiency levels with those pre-reading strategies affect the reading comprehension of the students.

### ***3. Results and Discussions***

Table 1. Two-way ANOVA conducted for the effect of pre-reading strategies, reading proficiency levels, and the interaction of the two variables.

## Tests of Between-Subjects Effects

Dependent Variable: READING

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3086.958 <sup>a</sup>	11	280.633	122.315	.000
Intercept	16523.011	1	16523.011	7201.603	.000
PROF	979.614	1	979.614	426.967	.000
PREREAD	1364.667	5	272.933	118.959	.000
PROF * PREREAD	692.839	5	138.568	60.395	.000
Error	825.967	360	2.294		
Total	20714.000	372			
Corrected Total	3912.925	371			

a. R Squared = .789 (Adjusted R Squared = .782)

Table 1 clearly shows that the effect of the variables reading proficiency levels, pre-reading strategies, and the interaction of pre-reading strategies and reading proficiency levels are all significant since in all cases, the p-value is .000, a figure which is less than the significant level which is set at .05. So, it can be concluded that the pre-reading strategies used can affect the reading comprehension of Iranian EFL learners, and that there is also a relationship between reading proficiency levels (i.e., low and high) and Iranian EFL learners' comprehension of reading passages with those pre-reading strategies, with a significant interaction effect between the two variables. Of course, table 1 also shows that there is a relationship between reading proficiency level and Iranian EFL learners' comprehension of passages, disregarding the pre-reading strategies.

In order to answer the ten questions of the study, that is, to find out whether each and every pre-reading strategy by itself affects the reading comprehension of the students, and in order to check where the interaction of reading proficiency levels and pre-reading strategies occurs, post hoc analyses were used. From among different methods of post hoc comparisons, *Scheffe test* was applied since as Hatch and

Farhady (1981) put it, it is “the most commonly used and the most conservative test of all” (p. 143). The outcomes of the Scheffe tests for the two independent variables are shown in tables 2 to 11.

Tables 2, 3, 4, 5 and 6 clearly indicate that all the five pre-reading strategies affect the reading comprehension of the students since the p-values for the comparison of the pretest which did not include any pre-reading strategy, with the posttest which had these five strategies as pre-reading strategies, are all .000, a figure which is less than the significant level, which is .05. The asterisks placed above the means differences show that the means are significantly different. So, null hypotheses number 1, 2, 3, 4, and 5 can be rejected, and it can be concluded that the five pre-reading strategies, that is, vocabulary introduction, pre-reading summary, anticipation guide, pre-passage questions, and K-W chart, all affect the reading comprehension of the students. Thus, it can be noted that providing linguistic schemata in vocabulary introduction, content schemata in pre-reading summary, and eliciting schemata in anticipation guide, pre-passage questions, and K-W chart all have positive impacts on the reading comprehension of the students.

Table 2. Scheffe test for the effect of vocabulary introduction as a pre-reading strategy on the reading comprehension of Iranian EFL learners.

Pre-reading strategy	Pretest (reading without and pre-reading strategy)	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Passages with vocabulary introduction	pretest	-3.6935*	.2721	.000	-4.6038	-2.7833

\* The mean difference is significant at the .05 level.

Table 3. Scheffe test for the effect of summary reading as a pre-reading strategy on the reading comprehension of Iranian EFL learners.

Pre-reading strategy	Pretest (reading without any pre-reading strategy)	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Passages with summary reading	pretest	-4.1613*	.2721	.000	-5.0716	-3.2510

\* The mean difference is significant at the .05 level.

Table 4. Scheffe test for the effect of anticipation guide as a pre-reading strategy on the reading comprehension of Iranian EFL learners.

Pre-reading strategy	Pretest (reading without any pre-reading strategy)	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Passages with anticipation guide	pretest	-5.3065*	.2721	.000	-6.2167	-4.3962

\* The mean difference is significant at the .05 level.

Table 5. Scheffe test for the effect of pre-passage questions as a pre-reading strategy on the reading comprehension of Iranian EFL learners.

Pre-reading strategy	Pretest (reading without any pre-reading strategy)	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Passages with pre-passage questions	pretest	-5.5161*	.2721	.000	-6.4264	-4.6059

\* The mean difference is significant at the .05 level.

Table 6. Scheffe test for the effect of K-W chart as a pre-reading strategy on the reading comprehension of Iranian EFL learners.

Pre-reading strategy	Pretest (reading without any pre-reading strategy)	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Passages with K-W chart	pretest	-5.6452*	.2721	.000	-6.5554	-4.7349

\* The mean difference is significant at the .05 level.

Table 7 shows that the mean difference between the reading comprehension of the low and high proficiency level students exposed to the new vocabularies as a pre-reading strategy is not statistically significant. In this table, the p-value is shown as 1.000, a figure which exceeds the significant level which is set at .05. As it can be observed in table 12, the mean of scores for the low proficiency level students exposed to the new vocabularies as a pre-reading strategy is very close to the mean of scores for the high proficiency level students presented the new vocabularies of the passage before reading (i.e., 6.9, and 7.2 respectively). This means that given the new vocabularies of the passage, the students at the low reading proficiency level can keep up with the high proficiency level students since their main difficulty in reading comprehension is the new vocabularies. Thus, null hypothesis number 6 cannot be rejected since there has not been a significant difference between the comprehension of the low and high proficiency level students given such a pre-reading strategy. Here, it can be concluded that activating the linguistic schemata, lexis in particular, works better for the students who are at the low reading proficiency level than those at the high level, since as Carrell and Eisterhold (1988) put it, the low proficiency level group are more word-bound than the high group, and for them meaning breaks down at the word level, not the sentence or the paragraph level. It can be concluded that

since the main difficulty of the students in low reading proficiency level lies at the word level (Aebersold & Field, 1997), overcoming such a deficiency, through pre-reading vocabulary practice, has a great effect on their comprehension, and fosters their understanding to a level where they can keep up with the high proficiency level group.

Table 7. Scheffe test for the relationship between reading proficiency level and Iranian EFL comprehension of passages with vocabulary introduction as a pre-reading strategy.

Pre-reading & proficiency	Pre-reading & proficiency	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Vocabulary-low	Vocabulary-high	-.2854	.3849	1.000	-2.0055	1.4347

Concerning the pre-reading summary, as it is manifested in table 8, the mean difference between the reading comprehension of the low and high proficiency level students is significant, since the p-value is .001, which is less than the significant level, that is, .05. Therefore, null hypothesis number 7 can be rejected. Table 12 shows that the mean of scores for the students given the pre-reading summary is 5.5 for the low group and 7.6 for the high group. Here, it can be concluded that high proficiency level students, possessing more sophisticated linguistic schemata, need content schemata for improving their comprehension. It was also argued that text summary gives readers a holistic framework of the text to be read (Chen & Graves, 1995). So, the high proficiency level students who are more proficient in figuring out the relationship between and among sentences, and are more skillful in detecting the coherence of ideas in the text, get more advantage of text summary than the low proficiency level group, who are more bound to lexis than the higher level sentences and paragraphs.

Table 8. Scheffe test for the relationship between reading proficiency level and Iranian EFL comprehension of passages with text summary as a pre-reading strategy.

Pre-reading & proficiency	Pre-reading & proficiency	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Summary-low	Summary-high	-2.1563*	.3849	.001	-3.8764	-.4361

\* The mean difference is significant at the .05 level.

As for the anticipation guide, table 9 shows that the mean difference between the reading comprehension of the low and high proficiency level students is significant, since the p-value is .001, which is less than the significant level, which is .05. Therefore, null hypothesis number 8 can be rejected. Table 12 shows that the mean of scores for the students involved in such a pre-reading strategy is 4.3 for the low group, and 6.5 for the high group. Therefore, it can be concluded that activating the schemata of the students using the students' own opinions and predictions and integrating the students' prior knowledge with the content of the passage by means of an anticipation guide is more efficacious for the high proficiency level students, since they are likely to be more proficient in stating their opinions and expressing their relevant background knowledge than the low proficiency level group.

Table 9. Scheffe test for the relationship between reading proficiency level and Iranian EFL comprehension of passages with anticipation guide as a pre-reading strategy.

Pre-reading & proficiency	Pre-reading & proficiency	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Anticipation-low	Anticipation-high	-2.1979*	.3849	.001	-3.8243	-.3840

\* The mean difference is significant at the .05 level.

Concerning pre-passage questions, table 10 indicates that the mean difference between the reading comprehension of the low and high proficiency level students is statistically significant, since the p-value is shown as .000, which is less than the significant level, that is, .05. Thus, null hypothesis number 9 can also be rejected. The mean of scores in table 12 for the students exposed to such a pre-reading strategy is shown as 4.0, and 6.4 for the low and high group, respectively. Thus, it can be concluded that this strategy is more useful for the high proficiency level students than the low proficiency level group. The result can be justified by stating that the high proficiency level students can respond to the pre-passage questions better than the students at the low proficiency level, as they have a more expanded linguistic knowledge by means of which they can figure out the purposes of the questions which guide them towards the main points of the text to be read.

Table 10. Scheffe test for the relationship between reading proficiency level and Iranian EFL comprehension of passages with pre-passage questions as a pre-reading strategy.

Pre-reading & proficiency	Pre-reading & proficiency	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Pre-passage-low	Pre-passage-high	-2.4375*	.3849	.000	-4.1576	-.7174

\* The mean difference is significant at the .05 level.

Regarding the K-W chart, once again the mean difference between the reading comprehension of the low and high proficiency level students has been shown to be statistically significant in table 11, since the p-value is indicated as .000, which is less than the significant level, that is, .05. Therefore, null hypothesis number 10 can also be

rejected. Table 12 shows that the mean of scores for the students handed in the K-W chart is 3.3 for the low group and 6.7 for the high group. The result can be justified by discussing that the high proficiency level students are more proficient in expressing their background knowledge and making predictions about the information that the upcoming text would provide for them. As a result, this strategy, which requires their elicitation of background knowledge, works far better for them than the low proficiency level group.

Table 11. Scheffe test for the relationship between reading proficiency level and Iranian EFL comprehension of passages with K-W chart as a pre-reading strategy.

Pre-reading & proficiency	Pre-reading & proficiency	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
K-W chart-low	K-W chart-high	-3.4146*	.3849	.000	-5.1347	-1.6945

\* The mean difference is significant at the .05 level.

Finally, as it can be observed in figure 2, the interaction effect, which has been shown to be significant in table 1, would occur in the case of vocabulary introduction, since by means of such a pre-reading strategy, the low proficiency level students can keep up with or even outperform the high proficiency level group.

Figure2. Graph for showing the interaction of proficiency levels and pre-reading strategies.

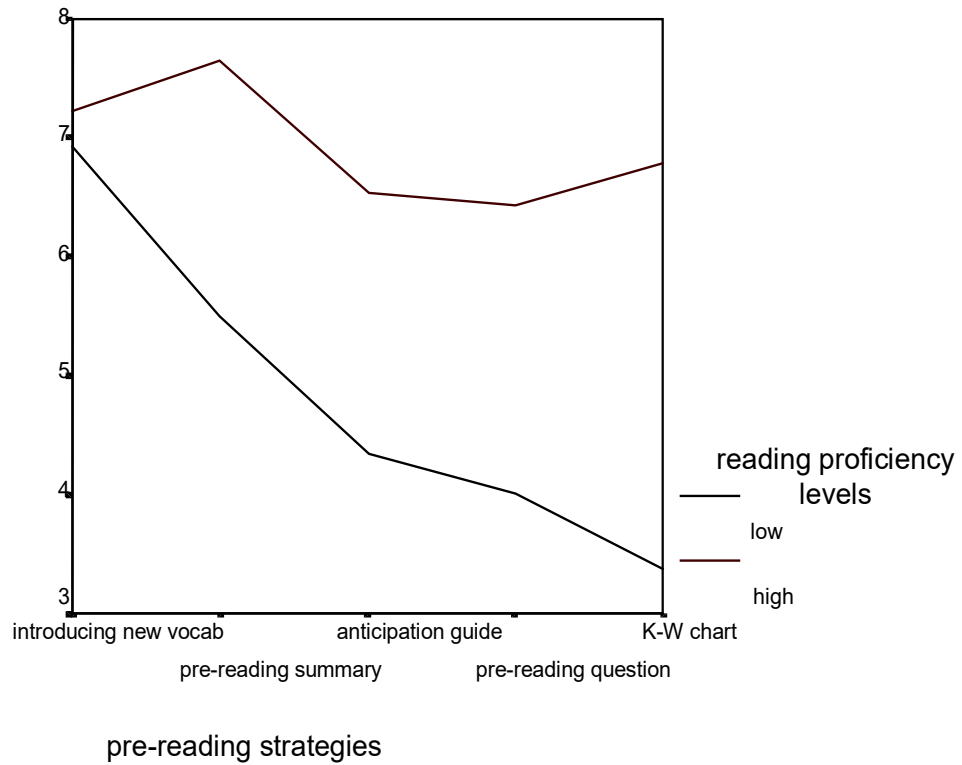


Table 12. The effectiveness of each pre-reading strategy at the low and high proficiency level groups.

Reading proficiency levels	Pre-reading strategies	Mean	N	Std. Deviation
Low	Vocabulary introduction	6.9333	30	1.3113
	summary reading	5.5000	30	1.6764
	anticipation guide	4.3333	30	1.5388
	pre-passage questions	4.0000	30	1.8570
	K-W chart	3.3667	30	2.1413
High	Vocabulary introduction	7.2188	32	1.5808
	Summary reading	7.6562	32	.6016
	Anticipation guide	6.5313	32	1.1067
	Pre-passage questions	6.4375	32	1.1341
	K-W chart	6.7813	32	1.6211
Total	Vocabulary introduction	7.0806	62	1.4519
	Summary reading	6.6129	62	1.6432
	Anticipation guide	5.4677	62	1.7246
	Pre-passage question	5.2581	62	1.9497
	K-W chart	5.1290	62	2.5446

As it can be seen in table 12, the highest mean of scores for the low group, which is 6.9, is for the passages with vocabulary introduction as a pre-reading strategy. Concerning the high group, the highest mean of scores, that is 7.6, can be found to be for the passages with pre-reading summary. Here, it can be concluded that exposure to the new vocabularies of the passages is the most effective strategy for the students at the low reading proficiency level since they are more word-bound than the high proficiency level group, and their main deficiency in linguistic schemata is with lexis and content words. As for the students at the high reading proficiency level, the pre-reading summary, which is a way of activating the content schemata, would be the most fruitful technique in enhancing comprehension since for this group, the linguistic schemata is expanded enough to understand the message. As a result, they may be more in need of activated content schemata for improving their comprehension. Finally, the means of scores for the students reading different passages with the afore-cited pre-reading strategies in table 12 indicate that the anticipation guide, pre-passage questions, and K-W chart, which required the students to draw on their already possessed background knowledge, were less effective than the vocabulary introduction and pre-reading summary, which provided the students with the required knowledge for reading the text.

#### ***4. Conclusions***

The outcome of the present study can be interpreted in the light of linguistic and content schemata activation by means of different pre-reading strategies. The findings can be justified by stating that providing and activating linguistic or content schemata (which has been manifested in the form of vocabulary introduction, and pre-reading summary in this study) is more effective for comprehension

than eliciting schemata, such that can be found in the anticipation guide, pre-passage questions, and K-W chart. These findings provide evidence for the notion that students with well-developed schemata (whether it is linguistic, content, or formal schemata) comprehend texts better than those with weakly-developed background knowledge. At this point, a reference can be made to Chen and Graves (1995) as stating that pre-reading strategies act as “devices for bridging the gap between text’s content and the reader’s schemata” (p. 664) and make the reading task easier and more enjoyable for the readers. However, it is advised that the pre-reading strategies be geared to the proficiency level of the students under the question.

### ***Implications***

#### **5.1. Implications for teaching**

It is necessary that language teachers become familiar with the students’ deficiencies and needs. The present study indicates the need for linguistic and content schemata activation in low and high proficiency level students and points to the usefulness of motivation-creating pre-reading strategies. So, it can be claimed that teachers can benefit from such strategies before reading in order to maximize students’ comprehension and motivate them to read. Of course, it is advisable that teachers match the intended pre-reading strategy with their students’ proficiency level, and offer the pre-reading strategies that are congruent with their proficiency levels.

#### **5.2. Implications for testing**

Not only can pre-reading strategies be utilized in teaching environments, but they can also be used when testing students’ comprehension. Such pre-reading strategies can be used to alleviate

students' anxiety in testing situations. In fact, in such a setting, pre-reading strategies act as aids for directing students towards the intended purpose and interpretation of the text, and students are left to figure out the details.

### **5.3. Implications for materials' development**

The materials offered for the EFL contexts are of utmost importance, as they should be devised in a motivating way for students in a manner that their achievement is ensured. As was previously stated, pre-reading strategies can be motivating devices for EFL students and can improve their comprehension. Therefore, those responsible for developing EFL materials can use different pre-reading strategies before the reading texts in order to increase students' motivation, and by doing so, they can help them better comprehend the reading passages.

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