# The effect of pictorial context on reading comprehension of EFL readers

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**ABSTRACT**

The present research conducted to investigate the effect of pictorial context on reading comprehension of EFL readers. To carry out the research 30 students were selected. They were studying at Oxford Representative language center in Iran. And they were assigned to two equal groups : a) the experimental group , and b) the control group . The two groups were assumed to be homogeneous. The experimental group received pictures immediately before they read the passages while the control group did not receive any pictures before reading the texts . Four English passages followed by five multiple-choice questions were administrated to the subjects. A T-test was then used to compare the mean scores of the two groups. Then the result of the T-test indicated that the subjects in the experimental group who had received pictures before reading the passages , scored significantly higher than the subjects in the other group . Therefore , the hypothesis of this study was supported and it was concluded that pictorial context can be a beneficial device to improve reading comprehension of EFL readers . Finally , from the pedagogical point of view , the findings of this study have paved the way for material developers and EFL teachers to improve the reading comprehension of EFL readers**.**

## Introduction

Reading is perhaps the most thoroughly studied and least understood process in education today. In many parts of the world a reading knowledge of a foreign language is often improved to academic studies/professional success and personal development. In fact, reading ability is often all that is needed by learners of English as a foreign language. Yet, despite this specific need for the foreign language, it is a common experience at least of EFL teachers that most students fail to learn adequately in the foreign language.

Recently, the goal of every language curriculum in our universities is to help students become accomplished readers and writers. Therefore, it is believed that the main objective of teaching English in our universities is simply improving the students reading comprehension.

Reading means getting meaning from printed texts. Reading is not phonics, vocabulary, syllabification, or other skill as useful as these activities may be. Reading is not passive; it is not the absorbing of information through the eyes by cooking sequentially at each word on a page of text. Reading is a meaning-making process, an active, constructive, creative, high order, thinking activity. It must be born in mind that reading is meaning oriented and in smith's terms, the reader is not moving from word to meaning but rather is moving from meaning to words.

In the last two decades, the accepted theory of EFL reading has changed from a serial (or bottom-up) model to reading as an interactive process. Widdowson (1979) has discussed reading in this light as the process of combining textual information with the information a reader bring to a text. In this view, the reading process is not simply a matter of extracting information from the text. Rather it is one in which the reading activates a range of knowledge in the reader's mind that s/he uses, and that in turn may be refined and extended by the new information supplied by the text. Reading is thus viewed as a kind of dialogue between the reader and the text.

A text written or spoken by itself does not carry meaning. Texts only provide direction for readers as to how they should construct meaning from their own previously acquired knowledge.

This previously acquired knowledge is called the reader's background knowledge, and the previously acquired knowledge structures are called schemata. According to schema theory, comprehending a text is an interactive process between the reader's background knowledge and the text. Efficient comprehension requires the ability to relate the textual material to one's own knowledge.

Recently studies of EFL reading have found that ESL readers may not efficiently utilize their schemata; specifically they may not utilize contextual information they are supplied with to facilitate comprehension.

Thus they may face a considerable difficulty in comprehension foreign text when reading them for the first time. Many researches suggest that the gap that often exist between reader's prior knowledge and the knowledge in the text can be bridged by providing readers with some pre-reading activities in order to create and activate the appropriate background knowledge or schema.

One of the most important activities employed as a pre-reading activity which has been focused in this study is pictorial context. This study was conducted to investigate the effectiveness of this activity on reading comprehension of Iranian EFL readers.

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## Statement of the problem

*As mentioned earlier, foreign languages have a great deal of difficulty in comprehending English texts. This difficulty is due to an inadequate knowledge of vocabulary, inability to handle grammatical structures, failure to recognize the logical connection between sentences, complete novelty of material and cultural concepts, and many others. Researches have shown that the background knowledge of the reader plays an important role in the process of reading. It is also suggested that prior knowledge is an integral part of reading comprehension. Therefore, the difficulty that student sometimes experience when trying to comprehend a written text is often due to insufficient or total lack of appropriate background knowledge. In order to fill the gap between what is in the text and the reader's background knowledge (schema) it is suggested that giving some materials or clues before the act of reading (per-reading activities) may improve reader's comprehension. One of the most important activities that can be used as per-reading activity is pictorial context. The aim of this study is to investigate the effect of pictorial context (especially pictures related to the main idea of the passage) on reading comprehension of Iranian EFL readers.*

## Hypothesis

With respect to the above discussion the research question to be investigated in this study is: Does pictorial context improve the reading comprehension of Iranian EFL readers? To settle this question, the following directional hypothesis is set in this study: pictorial context has a facilitative effect on reading comprehension of EFL readers.

## Significance of the study

As elaborated above, the main objective of the English teaching program in our schools and universities should be training the students in a particular way to increase as far as possible, their skill in comprehension of the passage they read. Therefore, regarding the facilitative effect of pre-reading activities on reading comprehension the findings of this study will be useful for teachers and material developers, in order to minimize reading problem and to maximize the rate of comprehension for EFL readers, because according to schema theory, activating the background knowledge of the readers before starting reading will enable them to infer what is implicitly stated in the text and to comprehend it at a reasonable rate. These per-reading activities are also useful for students where there is no teacher available.

## Literature Review

.A general out look on reading and reading comprehension process for many students is by far the most important of the four skills in a second language, particularly in English as a second or foreign language. Certainly if we consider the studying of English as a foreign language around the world, the situation in which most English learners find themselves, reading is the main reason why students learn the language.

Reading is a complex act requiring among other things, specific abilities and certain skills. A good reader is one who reads fast accompanied with full comprehension. It means that speed and comprehension in reading always go hand in hand. Rivers (1986) describes reading as the most important activity not only as a source of information and enjoyment, but also as a means of consolidating one's knowledge of the language. Finnocchiaro (1973) in the goal of teaching reading believes that "It helps the students to comprehend the written materials and also should give them the knowledge and ability to be able to read other material out of class and later in their lives with ease and enjoyment."

## Bottom-up and Top-down Processing

Bottom-up processing is decoding individual linguistic units (e.g., phonemes, graphemes, words) and building textual meaning from the smallest units to the largest and then modifying pre-existing background knowledge and current prediction on the basis of information encountered in the text.

In the bottom-up view of second language reading, the reader is involved in taking data from the text to the brain. However, when the brain attempts to find an existing knowledge structure for the incoming data to understand new information more quickly, the reader is involved in top-down processing of reading. Top-down processing refers to such high-order mental concepts as the knowledge and expectations of the reader. It is the making of predictions about the text, based on prior experience or background of knowledge, and then checking the text for confirmation or refutation of these predictions. As Carrell holds, in the top-down view of second language reading, not only is the reader an active participant in the reading process, making predictions and processing information, but everything in the reader's experience or background plays a potential role in the process.

All in all, it seems proper to maintain that there is a general agreement among researches on the interactive process of reading in which the reader starts with the perception of graphic cues, but as soon as these are recognized as familiar, schemata derived from both linguistic knowledge and knowledge of the world in general are brought in to play.

## Interactive Processing

More recently, a newer and perhaps even more insightful model of the reading process has been proposed by Rumelhart and further developed by Rumelhart and others which succeed to strike a better balance among the various sub-processes of reading and also may account for some empirical research that appears to conflict with certain top-down assumption. Unlike the top-down model, this so-called interactive model does not presuppose the primacy of top-down processing skills – the gradual replacing of painful word by word decoding with educated guessing based on minimal visual cues but rather posits a constant interaction between bottom-up and top-down processing in reading, each source of information contributing to a comprehensive recognition of the meaning of the text. In this view, good readers are both good decoders and good interpreters of texts, their decoding skill becoming more automatic but no less important as their reading skill develops, it is precisely this automaticity that frees up the mind of a fluent reader of a language to think about and interpret what they are reading, that is, to employ higher-level, top-down strategies like the use of schemata and other kinds of background knowledge. This is exactly what an interactive model would predict.

## Schema Theory and ESL Reading

Schema theory research shows that the greater the background knowledge reader has of a text's content area, the better the reader will comprehend that text. The implication of this is that some ESL students' reading problem is because of insufficient background knowledge. In such a case, comprehension can not occur because there is little or nothing in the reader's head that relates to the knowledge in the text. The question that now comes into mind is: can we improve ESL students' reading comprehension by helping them build background knowledge on the topic prior to reading through

appropriate pre-reading activities? Many researches suggest an affirmative answer to this question.

Various type of pre-reading activities may be needed in order to help second language readers both to build the background knowledge they need for their reading and to show them how to activate or access such knowledge in the process of reading, once it exists. Pre-reading activities must accomplish both goals: building new background knowledge as well as activating existing background knowledge.

## Pre-reading Activities

*Students of English as a foreign language experience have considerable difficulty in comprehending English texts when reading them for the first time. This difficulty is often due to insufficient or total lack of appropriate background knowledge or schemata. Many researches suggest that the gap that often exists between the readers' prior knowledge and knowledge in the text can be bridged by providing the readers with some pre-reading activities in order to provide and/or activate appropriate background knowledge.*

Pre-reading activities are intended to help EFL students over come three major problems that interfere with their comprehension: a) lack of vocabulary knowledge, b) difficulty in using language cues to meaning, c) lack of conceptual knowledge.

Therefore, fulfilling pre-reading activities prior to involving the students in EFL texts will provide a propitious learning environment and will help them to comprehend and understand these texts better. Three pre-reading activities that seemed most practical for EFL learners are vocabulary pre-reading, pre-questioning , and pictorial context will be cited.

## Pictorial aids

Pictorial context involve the presentation of one or more pictures about passage content before reading a passage. The purpose of showing pictures to students also varied across studies. Pictures can add to readers' interest and enjoyment of reading, affect readers' attitude, arouse emotional responses and provide spatial information that is difficult to express in words. Pictures are intended to illustrate sentences of the passage, paragraphs, main ideas, only certain portion of the passage, critical conceptual attributes of text, the scene of the passage, principles described in the passage, to add humor to the passage, or to provide contextual information.

## Pictorial context and EFL readers' comprehension

The studies on the effect of pictorial context on EFL readers' comprehension are limited to two pieces of research. The first one was conducted by Omaggio (1979) with college students of French. Omiggio's findings are in concern with Bransford and Johnson's findings that pictures may facilitate foreign learners' comprehension of text by providing semantic context into which students can fit the context of the passage while they read. Omaggio also found that of the pictures he presented before reading, only the one that was most general in nature improved subjects' comprehension.

We will all agree that picture books have an important role in every classroom. The wonderful combination of visual and textual story that picture books offer is a valuable literary experience. Finally, pictorial context is expected to create an appropriate semantic context, which might help subjects make right choice to predict and associate meaning during reading.

The present study was also under taken to find out whether the comprehension of students who received pictures related to

the main idea of the passage would differ from the counter part receiving no picture at all.

## Design of the study

### Purpose

The present study was designed to test the hypothesis that including pictures (as a pre-reading activity) in a reading program, i.e., before starting each reading passage, can improve reading comprehension of EFL readers because it is believed that, among other things, pictorial context can activate and/or provide the appropriate background knowledge, as by schema theory.

### Subjects

Thirty students who were studying at level three at Zaban Sara, foreign language institute, participated in this study. They were all men in order to control the sex variable. (Level three, i.e., they were studying East West1, the first part of the book, i.e., units 1 to 5). They were all adults between range of 20-25 years old, and all were assumed to have the same level of education and background in English. The subjects were randomly assigned to two equal groups: a) experimental group and b) control group.

### Materials

The subjects were given a test. This test included four English passages which were taken from "The ILI English course"(The Iran Language Institute, 2000) and high school books(1987). These passages were about: 1) Starts and Planetary skies, 2) A funny trial, 3) Making Decisions and 4) Ecology.

The passages were followed by 5 multiple-choice questions. Four pictures, relating to the main idea of each of the passage, were also provided for the experimental group.

### Procedure

As it was elaborated earlier, the participants of this study were 30 male students who were at level 3(i.e., East West 1, unit 1 to 5) of learning English. Then they were divided to two groups of experimental and control, 15 each. In the next phase of the study four different English passages were used. The experimental group was given four pictures related to the main idea of the reading passages immediately before they started reading the passages. The students were also directed to pay close attention to the pictures before reading the passage. The control group received the same passages but was not supplied with pictures before reading the passages.

After the subjects were tested, the performance of the two groups was scored in order to find out which group performed better than the other group in this experiment.

### Data Analysis

The main goal of this study was to determine the effectiveness of pictorial context on reading comprehension of EFL readers. The data gathered through this study was then subjected to statistical analysis, and the mean scores of the two groups in the test.

### Results

The purpose of this research was to determine if pictorial context especially pictures related to the main idea of the passages had any significant effect on reading comprehension of EFL readers. We had two groups under the study: experimental and control. The experimental group received pictures about the main idea of the passages and the control group received the same passages but did not receive pictures before reading the passages.

In order to determine the mean differences of the scores of the two groups in the test, a T-test applied, the result of which is presented in table below:

## Discussion

The result of this study asserts that pictorial context as a pre-reading activity can be an effective beneficial device and an important tool to be applied in a reading program in order to activate the students' relevant schemata necessary for the comprehension of the text, because one of the prerequisites for successful reading comprehension is to have an appropriate schema. According to schema theory, therefore, reading is an interactive process between the readers' background knowledge and the text. Thus, if a student lacks adequate schemata, s/he may be unable to process interactively and rely on bottom-up processing and focusing on each separate word in order to understand the meaning of a text.

It would also appear that L2 learners' background knowledge or schemata play a significant role in their ability to process and comprehend textual materials in L2. Thus, the main difficulty those ESL students sometimes experience when trying to comprehend written texts is often due to insufficient or total lack of appropriate background knowledge. In such a case, comprehension can not occur because there is little or nothing in the readers' head that relates to the knowledge in the text.

In order to fill the gaps between what is in the text and the prior knowledge of readers, it was suggested that providing students with some material before the act of reading may increase their reading comprehension. The use of pre-reading activities is based on the assumption that if learners activate their existing text-relevant background knowledge in an appropriate manner prior to processing a given text, they will be able to relate the textual information more meaningfully to their existing knowledge structure and thus comprehend and assimilate text content more effectively. One of the most important techniques employed to pre-reading activity is pictorial context which was the focus of this study. Pictorial context involves the presentation to the students of one or more pictures about passage content before reading a passage. Pictorial context was expected to arouse subjects' curiosity and interest in the context of the passage.

Thus, the researcher raised the following question: Do pictures related to the main idea of the passage have any effective role in enhancing the EFL readers' comprehension of English texts? To answer this question, the subjects overall performance on English text in the presence and assence of the pictures related to the main idea of the passages were measured and the result were statistically analyzed. The result of this experiment supported the hypothesis and confirmed that pictures related to the main idea of the reading passage can increase the reading comprehension of EFL readers.

## Implications for Teaching

The EFL teachers must fill in the gaps before the reading task is begun when the sufficient introducing preparation has not been provided for the students. Therefore, it must be said that pictorial context as a pre-reading activity becomes a useful tool for EFL teachers to facilitate students' reading comprehension and to make reading an enjoyable activity. In sum, the findings of the present study, asserted that pictorial context is an effective motivational device and an important tool for enhancing students' reading comprehension. Therefore, the present study has paved the way for EFL material designers and EFL teachers to facilitate reading comprehension of English text for EFL readers.

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*Table 1.  Means and Standard Deviation of the two groups*

| Group | Number of subjects | Mean | S.D |
|---|---|---|---|
| Experimental | 15 | 18.80 | 1.08 |
| Control | 15 | 17.73 | 1.48 |

**Appendix**
**Table 1.**

| N | Picture - Group | No - Picture - Group |
|---|---|---|
| 1 | 20 | 20 |
| 2 | 20 | 20 |
| 3 | 20 | 19 |
| 4 | 20 | 19 |
| 5 | 20 | 19 |
| 6 | 19 | 18 |
| 7 | 19 | 18 |
| 8 | 19 | 18 |
| 9 | 19 | 17 |
| 10 | 18 | 17 |
| 11 | 18 | 17 |
| 12 | 18 | 17 |
| 13 | 18 | 16 |
| 14 | 17 | 16 |
| 15 | 17 | 15 |

**Table 2.**

| Means and Standard Deviation of the Two Groups | | | |
|---|---|---|---|
| Group | Number | Mean | S. D. |
| Experimental | 15 | 18.80 | 1.08 |
| Control | 15 | 17.73 | 1.48 |

**Table 3.**

| T – value for the scores of both groups | |
|---|---|
| T – value | P – value |
| 2.24 | 0.033 |