The Effect of the Type of Pre-reading Tasks on the Reading Comprehension of Culture-Specific Texts

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Abstract

Regarding the intimacy of language and culture in language studies and language education, teaching culture-specificities have drawn a lot of attention. It has always been a hotly-debated issue that "how" culture-specific points should be taught. This article is an attempt to propose a model for the facilitation of this "culture transference". This study particularly addresses teaching culture-specific texts. To this end, 60 students were randomly selected and assigned into 3 homogeneous classrooms (A, B, C). The same culture-specific passages were presented to these groups, in a variety of pre-reading modalities: pictorial context condition, vocabulary pre-teaching and no pre-reading. The results of the study indicated that culture-specific texts taught in pictorial context condition are grasped better than those taught by vocabulary pre-teaching and no pre-reading. This outperformance of pictorial context learners compared to the other two groups can be justified using schema theory and dual coding theory (DCT). The results seem to be of relevance and help for pedagogical purposes in the setting of Iranian L_2 classroom.

Keywords: Contextual materials, Dual coding theory, Proficiency, Schema, Vocabulary pre- teaching

I.   Introduction

This study examines the effects of using different types of pre-reading tasks as contextual supplements for improving foreign language English culture-specific texts' reading comprehension. Culture-specific texts due to the lack of appropriate schema and background knowledge on the part of the learner demand proper methods of exposure. The importance of background knowledge has been acknowledged by various scholars (Anderson and Pearson, 1988; Carrell and Eisterhold, 1983; Gibbs, 2001). Skehan (1988) drawing our attention to this point asserts that the effective application of top-down processing would decrease the degree of the reliance on acoustic or visual input. According to Chia (2001), some students report that they have no problem with understanding both words and sentence structures of the paragraph, but they can't reach satisfactory interpretation of the text.

The rapid development of multimedia, which combines two or more media such as text, video or sound, has a great influence on various realms of learning and teaching. How to

integrate pictures and videos effectively into language learning is central to, in particular, language instructors' and learning tool producers' interest. However, there's relatively little empirical research applying the special functions of pictures and videos in improving reading comprehension in culture-specific texts. Studies show that reading comprehension is facilitated by a number of factors: presenting contextual visuals (Ellis, 1993 ; Hudson, 1982 ; Mayer,1994 ; Robinson, 1991 ; Wilson, 1986); aural information and discussion (Tudor, 1989); question pre-viewing and vocabulary pre-teaching (Taglieber, 1988 ; Nuttal, 1982 ; Tudor, 1989). Most studies suggest that reading comprehension is improved more when contextual cues are presented in advance of reading texts.

In the present study, culture-specific texts were employed as stimulus material. The aim was to investigate the effects of using different pre-reading presentation techniques as contextual supplements for improving foreign language reading comprehension in culture-specific texts. Although culture-specific texts are difficult for foreign language learners, the main reason for choosing culture-specific texts was to identify whether or not the results of previous studies using different texts could be applied even when culture-specific texts are used. To be useful as a foreign language material, culture-specific texts need more use of non-linguistic information and prior knowledge of schemata for reading comprehension because the content may be difficult to understand as compared to other texts (Cook, 1989). Paralinguistic information provided by visual materials facilitate reading comprehension (Paivio, 1991). However, these linguistic features have not been employed effectively in accordance with learners' language proficiency for improving reading comprehension in particular in EFL classrooms in Iran.

The primary purpose of the present study is to compare the role of different pre-reading tasks using pictorial context and vocabulary pre-teaching in improving the comprehension of culture-specific texts. Within this framework, theoretical issues will be examined arising from the application of different pre-reading tasks. The present study used culture-specific texts in an EFL setting. Although the content of culture specific texts might be difficult to comprehend for EFL students, for the first time, this work provided an opportunity for

language teachers to further understand the significance of using visual codes in teaching culture-specific texts.

Reading not only forms a basic component of communicating with other people in their native language, but naturally plays a crucial role in developing second/foreign language learning or acquisition (Rivers, 1981).

Because of attitudinal change and increased awareness about reading comprehension, some studies (Hudson, 1982; Nuttal, 1982; Omaggio, 1979; Paivio, 1991) suggest that the use of pictures facilitate reading comprehension based on schema theory and dual coding theory. Hudson (1982) and Omaggio (1979) suggest that the proper schema required to comprehend the information contained in a prose passage is constructed when a picture is organized before a prose passage, so making it much more effective for comprehension and remembering.

Further, the development of the media technology has influenced studies of the effect of visual aids in second/foreign language reading comprehension. In particular, the use of videos and pictures has been shown to motivate and interest learners, and also to improve second/foreign language reading comprehension (Gibbs, 2001). Such studies show that the effect of visual cues may be strongly dependent on a number of factors: the selection of visual cues including sufficient contextual clues, degree of difficulty of the text, learners' language proficiency and the period of exposure to visual cues (Celce-Murcia and Olshtain, 2000). Dutta (1994) argues that visuals presented as advance organizers facilitate comprehension. Thus visual cues are now widely recommended as teaching materials for improving second/foreign language reading comprehension as well as for developing learning in realms not directly related to language instruction.

As understanding grows about the way visuals affect second/foreign language reading comprehension and information processing, more appropriate application of visual information for language or information processing will result in improved language reading comprehension as well as improved synthetic language teaching and learning.

II. Methodology

A. Participants

The participants in this study were 60 volunteer pre-intermediate students studying English in Goldis language institute in Tabriz. The age range of the participants was between 17 to 25. The native languages represented included Persian and Azeri Turkish. In order for us to make sure of the homogeneity between control group and experimental groups, a proficiency pre-test was administered to the population of 80. Based on the results of the pre-test, 60 students were assigned into three groups of A, B, and C representing control group and experimental groups, respectively.

Not to mention that the pre-test used as the placement test was the standardized test by Jack C. Richards, which has been the placement criterion for around 4000 students for a couple of years in the above-mentioned institute .

B. Instrumentation

In order to fulfill the objectives of the study, some instruments were utilized:

1. A TV set and a video set to show the culture-specific episodes to the learners

2. Pictures and posters

3. Five culture-specific texts including multiple-choice questions taken from the Internet and Jack C. Richards' books. The texts were about Halloween's Day, April Fools' Day, Saint Patrick's Day, Easter and Valentine's Day.

4. Proficiency pre-test: This test consists of three sections: Listening (20 items), Reading (20 items) and Language use (30 items), and requires 50 minutes to administer.

5. Questionnaire: This questionnaire includes 3 questions reflecting students' ideas and background knowledge of the topics in question.

C. Design

This study tests the effectiveness of two different advance organizers. We wanted to find out which elements are more important to students for their understanding of culture-specific texts. Treatment (I) used an advance organizer to provide students with prior information using pictorial context. Treatment (II) used another advance organizer to tell students about the key words they were going to read. In the control group no treatment was included. We

wanted to analyze the effect of pictorial context and vocabulary pre-teaching (independent variables) on the reading comprehension of culture specific texts (dependent variable).

D. *Procedure*

As mentioned in the previous sections, three groups of students with the same range of language proficiency were selected from the English students in Goldis institute. This was carried out through the administration of Jack C. Richard's placement test. The acceptable score of this study was 24-36 i.e., those students who obtained scores between 26-36 were allowed to participate in this research. The participants were tested in their own classes as part of their regular classroom activity. The learners were provided with the five culture-specific passages of Halloween's Day, April Fools' Day, Saint Patrick's Day, Easter and Valentine's Day in five consecutive sessions. In order to guarantee the homogeneity of the three groups in terms of their background knowledge and accordingly ensure the validity of the study's results, they were given a questionnaire before reading the passage to reflect their ideas and their background knowledge of the topic in question. Skimming through the participants` opinions, we came to conclusion that the overwhelming majority of the learners lacked considerable knowledge of the cultural occasions, which might have adversely affected the results.

The time allotted for the reading of passages was 15 minutes, of which 10 minutes were allocated for reading and while reading activities and the first 5 minutes were devoted to pre-reading activities and preparation of the readers for the while-reading and post-reading activities. In the control group (Group A) no pre-reading activity was included. However, in both experimental groups B and C we used pre-teaching vocabulary and pictorial context conditions as pre-reading activities, respectively. In group B a list of key words and specific words were made on the board and were contextualized in the framework of some sample sentences and these sentences were not explicitly related to the passage. Not to mention that in the event of miscomprehension or non-comprehension on the part of the readers, the teacher facilitated the process of understanding by providing further examples and discussions. In group C the culture-specific occasion was depicted by visual aids, pictures

and videos. During the five minutes allocated time for pre-reading activity, discussions about the episodes and pictures were encouraged. The readers were also urged to personalize and find some corresponding events in their own culture. Such comparative analysis of the cultural events came to be more insightful and discussion-propelling.

In the sixth session, students were given twenty questions from the passages which they had read before. The typology of questions included as reading comprehension questions were multiple-choice questions. The papers were corrected and the results were analyzed using ANOVA statistical method.

The given passages were validated by some of the experienced staff as being culture-specific and by the same token the list of key words were subjected to the unanimous approval of them.

III.   Results and Analysis

Employing ANOVA statistical procedure in addressing data requires fulfillment of two conditions:

1. The data should enjoy normal distribution.
2. The variance of population should be equal.

In our study the existence of these conditions can be firmed both intuitively and quantitatively.

Examining the bell-shapedness of the Figure 1 and the tendency of data to center around the normal distribution line in Figure 2, we may intuitively claim that the data have normal distribution.

Also, Table 3 quantitatively verifies the normal distribution of data; P-value (Exact sig.) is greater than 0.05 ($0.207 > \alpha = 0.05$). Not to mention that one – sample Kolmogorov – Smirnov test was used to quantitatively approve the existence of normal distribution.

In order to meet the second condition of employing ANOVA as the statistical method of the study, we proved that the variance of the population was the same. To this end we employed Leven Test. Since P-value (0.620) is greater than $\alpha = 0.05$, we may say that the population have equal variance.
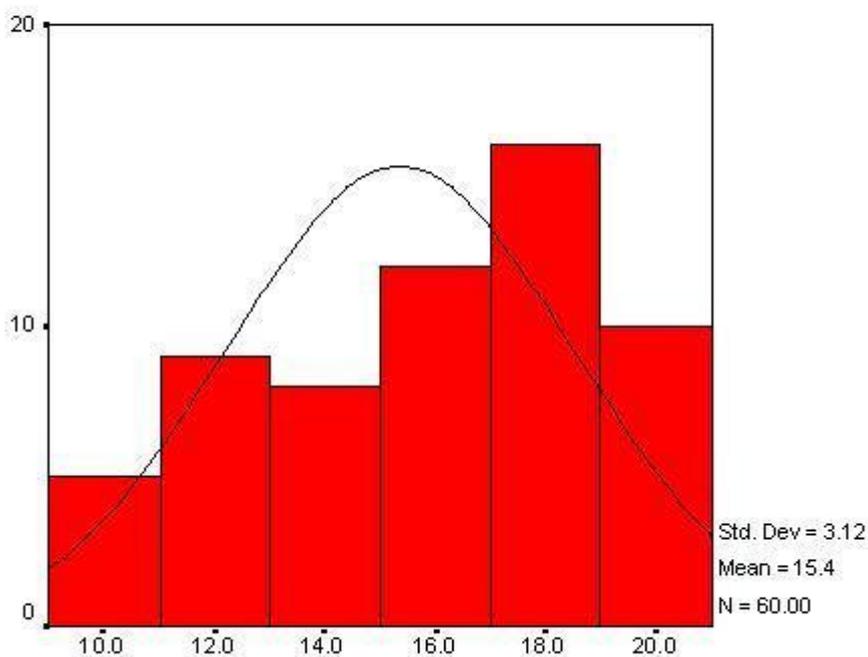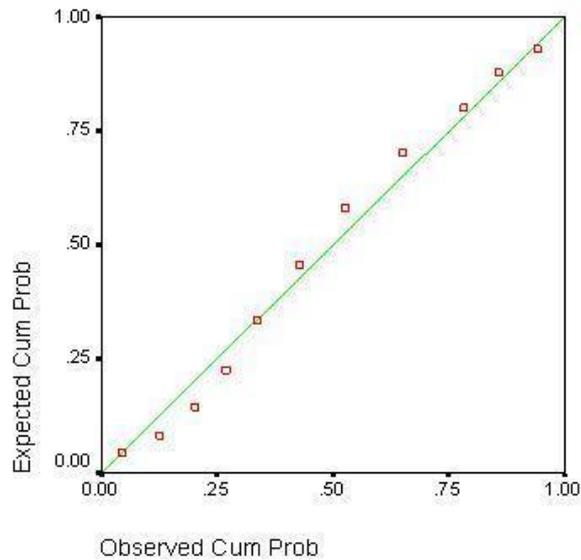
SCORE   **Figure.1.** Bell-shaped curve

TABLE I

One-Samplekolmogorov-Smirnov Test

		SCORE
N		60
Normal Parameters [a,b]	Mean	15.3500
	Std. Deviation	3.12358
Most Extreme Differences	Absolute	.135
	Positive	.092
	Negative	-.135
Kolmogorov-Smirnov Z		1.043
Asymp. Sig. (2-tailed)		.227
Exact Sig. (2-tailed)		.207
Point Probability		.000

a. Test distribution is Normal.

b. Calculated from data.

TABLE II

One-Samplekolmogorov-Smirnov Test

SCORE

Levene Statistic	df1	df2	Sig.
.482	2	57	.620

Meeting the two above-mentioned preconditions we ran the ANOVA statistical analysis. As the result of ANOVA statistical method shown in Table 5 represent (P-value = 0), we may claim that there is a statistically meaningful difference between the groups of the study. We also used "multiple comparisons" to see which groups are meaningfully different form each other.

Three peer comparisons between the groups revealed that the groups have meaningful differences among them. Because in all of the groups P-value is smaller than $\alpha = 0.05$, we may claim that the differences are not because of chance.

Mean Plot (7) and Box Plot (4) figures show that pictorial pre-reading task produces better results than vocabulary pre-reading task and vocabulary pre-reading in turn leads to better results than control group does.

TABLE III

ANOVA

SCORE

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	136.900	2	68.450	8.893	.000
Within Groups	438.750	57	7.697		
Total	575.650	59			

TABLA IV

Multiple Comparisons

Dependent Variable: SCORE
LSD

| (I) GROUPS	(J) GROUPS	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
With picture	With Vocab	1.8500*	.87735	.039	.0931	3.6069
	Control Group	3.7000*	.87735	.000	1.9431	5.4569
With Vocab	With picture	-1.8500*	.87735	.039	-3.6069	-.0931
	Control Group	1.8500*	.87735	.039	.0931	3.6069
Control Group	With picture	-3.7000*	.87735	.000	-5.4569	-1.9431
	With Vocab	-1.8500*	.87735	.039	-3.6069	-.0931

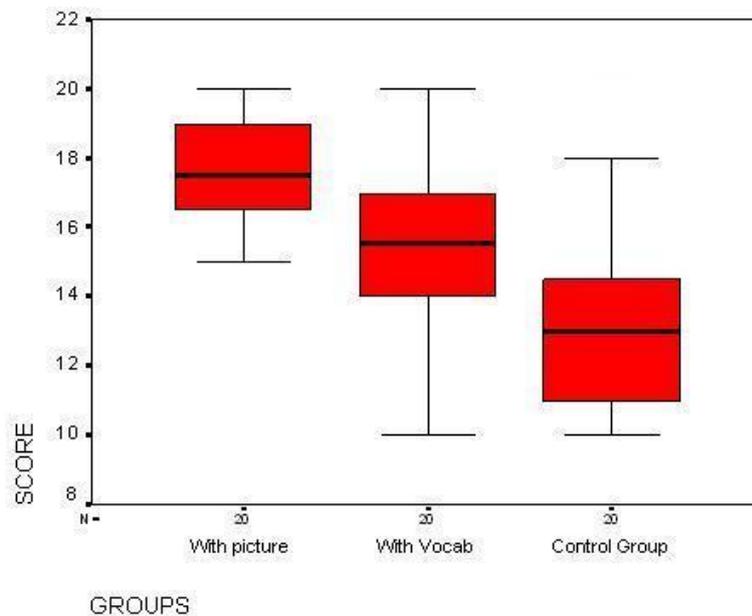*. The mean difference is significant at the .05 level.
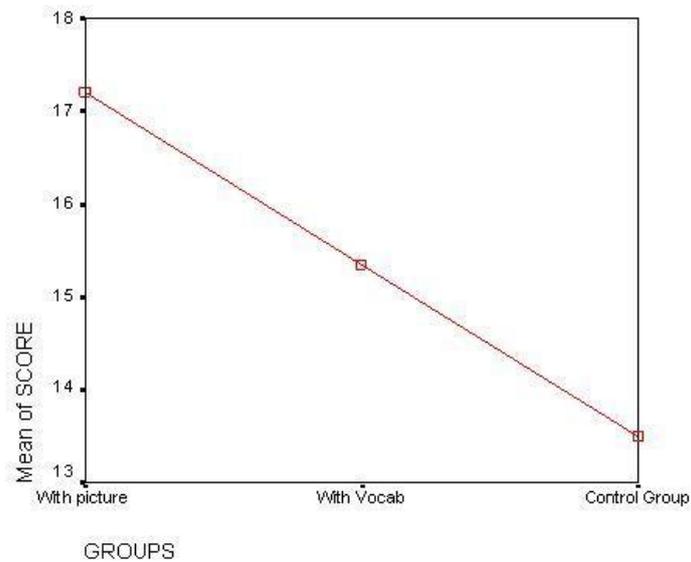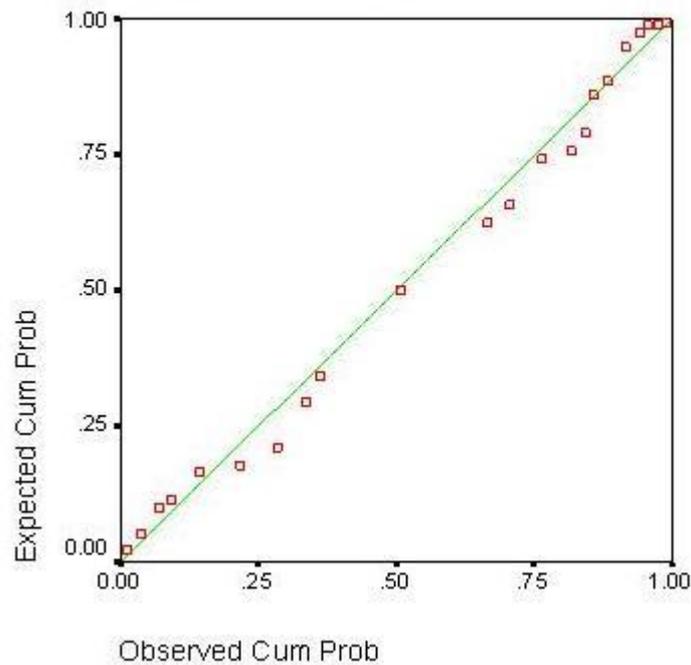
Figure.3. Mean Plot

Figure. 4. Box Plot

Figure.5. Normal P-P Plot of RES

TABLE V

One-Sample Kolmogorov-Smirnov Test

		RES
N		60
Normal Parameters a,b	Mean	.000000
	Std. Deviation	.6186501
Most Extreme Differences	Absolute	.150
	Positive	.150
	Negative	-.133
Kolmogorov-Smirnov Z		1.162
Asymp. Sig. (2-tailed)		.134
Exact Sig. (2-tailed)		.121
Point Probability		.000

a. Test distribution is Normal.

b. Calculated from data.

in memory (Ellis, 1993 ; Reiber, 1994) and triggering students' interest and motivation, assisted in reading comprehension of culture-specific texts. The advantage Figure 5 and Table 5 show that the residuals of our model have normal distribution so our analysis is reliable. It is worth mentioning that the reliability of "reading comprehension test" was (0.68).

This part is supposed to provide discussion and theoretical foundation for our question raised in the Introduction section in the light of the results presented above. The main purpose of this study was to evaluate the effect of various modalities of exposure to pre-reading activities in a typical English classroom in Iran.

We particularly drew on the two theories of schema theory and dual coding theory on validating the result gained in the study. Schema theory research provides strong evidence for the effectiveness of pre-reading activities that include both providing the outline for reading the text and teaching cultural key concepts. According to Chastain (1988), pre-reading activities motivate readers to read the text. When they are motivated and prepared for the reading activity – they complete the activity better and with less effort and are eager to participate in the activity since they have gained confidence. The goal of pre-reading activities is to activate or build, if necessary, the students' knowledge of the subject and to provide any language preparation that might be needed for coping with the passage and finally to motivate learners to read the text.

According to Taglieber (1988), pre-reading activities prepare the learners for "the concepts that follow, make reading task easier, connect the new context more meaningfully to prior knowledge and make reading more enjoyable" (p. 456).

If the readers do not have sufficient background knowledge, then the teacher should provide them with at least some background knowledge. Activating readers' prior knowledge of a topic before they begin to read may help students' comprehension (Carrell and Eisterhold, 1983 ; Grabe, 1991).

Mayer (1984) also has demonstrated the facilitative effects of activating native readers' prior knowledge relevant to understanding the new text (cited in Taglieber, 1988, p.456). Wallace (1992) also argues that in order to interact efficiently with the text, the second language reader needs access to content as well as context. In other words, the second

language reader will need to draw on appropriate schematic knowledge to reach satisfactory interpretation of the text.

The results of this study indicate that pre-reading tasks facilitate EFL students` comprehension in a varying degree. Of the two pre-reading activities used in this study, vocabulary pre-teaching, although superior to the control condition, was less effective than pictorial context. It can be argued that although vocabulary pre-teaching (knowledge of the meaning of the words) was essential for adequate comprehension to occur, enhanced background knowledge from pictorial context condition made students more able to use contextual factors to arrive at a satisfactory meaning for the passages even when all the words were not known.

Stanovich (1980), in his discussion of an interactive compensatory model of reading fluency, cites evidence that readers compensate for poor word recognition ability by relying on contextual information. As a matter of fact such an interactive model of reading, which highlights the importance of background knowledge to reading comprehension, has led to the emergence of schema theory of reading. As noted earlier, schemata are the organization of individual's past experience, that is, our past experience or the world knowledge we have in our mind is organized into some interrelated patterns (Anderson, 1977).

Furthermore, Taglieber (1988) asserts that pre-reading activities that introduce pictorial context condition in a more global context are more effective in evoking or building readers' appropriate schemata than words, either in the framework of sentences or in isolation. By the same token in an experiment conducted by Hudson (1982), it was substantiated that the success in the performance of the pictorial context condition surpassed the vocabulary pre-teaching. Actually, picture – discussion – prediction condition (the case of the pictorial context in our study) produced higher text scores than vocabulary pre-teaching.

Another theoretical basis which was used to support the results was the dual coding theory. As stated before, dual coding theory (DCT) deals with the effects of imagery on memory. It proposes that memory consists of two separate but interrelated codes for processing information, one verbal and the other visual. The verbal and visual systems can be activated independently, but there are interconnections between two systems that allow dual coding of information. The interconnectedness of the two systems permits cueing from one

system to the other, which in turn facilitates the interpretation of our environment (Reiber, 1994). Such an interconnection between the two systems of learning might provide us with a better position to argue for the inclusion of pictorial context condition in pre-reading stage of reading activities. It may be argued that the reason why pictorial group outperformed the two other groups (vocabulary pre-teaching and no pre-reading) stems from the further enhancement of learning in the pictorial group, in the sense that the mutual enhancement and reinforcement of the two codes of learning guarantees further retention and easy retrieving of information.

In this respect Reiber (1994, p. 7) asserts that visual system's information recall is much faster than verbal system's information recall because visual system accesses information synchronously while verbal system's access to the information is sequential.
In the case of our study we may claim that the outperformance of pictorial group was due to the facilitative effect of visual memory on learning. In other words, in Reiber's term in such pictorial context condition the verbal system and visual system operate synchronously and learning is not the matter of sequential access to information. The pictorial context functioning as visual stimuli stimulates a kind of top-down processing for reading. As discussed in the relevant literature, various connections between verbal and visual stimuli are put in operation and facilitate the process of comprehension. However, such conditions for learning are not true for vocabulary pre-teaching. To put in simple words, in pictorial condition learning is facilitated by a set of "means", but in vocabulary pre-teaching one "means" is operative.

II.   Conclusion

There is considerable research investigating the effect of visual information for improving reading comprehension using different texts. However, the comparison of different types of pre-reading tasks for improving reading comprehension of culture-specific texts has received very little attention.

The finding on the effectiveness of pictures and images, suggest that contextual visual cues, activating relevant elements stored of visual cues accompanied by written text for improving reading comprehension is in accord with Paivio's (1971) dual coding theory.

This research confirms evidence that presenting contextual images with culture-specific texts may enhance foreign language reading comprehension. Even though all contextual visual information is helpful, it should be remembered that foreign language reading comprehension will not be enhanced as easily as expected, without the development of learners' linguistic knowledge. The latter may be one of the most important components for improving reading comprehension.

Schema theory and dual coding theory (DCT) compel us to look at reading process and tasks differently. This study along with current research in teaching and learning supports the facilitative and positive effect of schema theory and DCT on reading, particularly in culture-specific texts.

In this study, particularly the significance of DCT and visual memory (pictorial context condition) came to light. It was revealed that placing the learners (readers) in a context supported by visual realia is a much facilitating factor in teaching unfamiliar texts (culture-specific texts) of which readers have meager information. Without doubt, the pedagogical value of using movies, pictures, drawings and the like further corroborated in this study.

III.   Acknowledgements

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