

The Effect of Topic Familiarity on EFL Reading Comprehension

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Abstract

Reading is seen as an interactive process between a reader and a text, which would eventually lead to automaticity or reading fluency. The reader is supposed to interact dynamically with the text so as to elicit meaning through making use of two important types of knowledge : linguistic and schematic (content / world background knowledge). Within the latter type, the reader fits what he / she already knows with what is found in the passage. If new textual information does not fit into a reader's schemata, the reader misunderstands the new material, ignores it, or revises the schemata to match the facts within the passage. This paper focuses on schema theory with special attention to content schemata and topic area so as to shed light on its importance in reading comprehension.

تأثير ألفة الموضوع على قدرة الفهم عند متعلمي اللغة الانكليزية من الأجنب

تعتبر القراءة عملية تفاعلية بين القارئ و النص و التي تؤدي في النهاية إلى ما يسمى بسلسلة القراءة، حيث يفترض أن يتفاعل القارئ مع النص لاستخراج المعنى من خلال الاعتماد على نوعين من المعرفة: المعرفة اللغوية و المعرفة المسبقة بالموضوع أو محتوى النص. حيث يقوم القارئ في النوع الأخير بمقارنة معرفته المسبقة مع ما يجده في النص. فإذا لم يتناسب محتوى النص مع معرفة القارئ فإنه يسيء فهم الموضوع أو يتجاهله أو يحاول تعديل معرفته لتناسب مع موضوع النص. ولهذا تركز هذه الدراسة على أهمية نظرية المعرفة المسبقة بالمحتوى مع الاهتمام الخاص بخطة المحتوى و مجال الموضوع و تقديم بعض الأساليب لمساعدة الطلبة لبناء معرفة جديدة و ملائمة لمحتوى النص.

Introduction

Reading has always been described as a passive / receptive skill in the process of language learning since it is believed that the learner's role is restricted to be a passive receiver of information from what he / she is reading. However, with the growing interest in this skill and the factors that may affect it, researchers come to emphasize the role of the reader and consider him / her an active participant in the reading activity. Consequently, reading comprehension is now dealt with as a very complex process and in order to understand how readers can get sense of written symbols, it is essential to grasp the role of factors leading to the product of this process be understood properly.

Generally speaking, two kinds of factors have been found to affect the skill of reading comprehension; internal and external. The internal factors, which can also be called reader variables, refer to everything related to the reader such as his / her cognitive abilities and strategies, background knowledge and other affective characteristics. The external factors, on the other hand, are related to the text itself, context of reading and the writer.

The present study is confined to discuss the problem that can be faced by EFL teachers when selecting an appropriate passage to teach in reading comprehension classes. Day (1994 : 20) observes that if the passage chosen is inappropriate for whatever reason, the chances of the teacher's success in presenting it and those of learners in understanding it would be substantially lessened. Consequently, Day (1994 : 21) maintains that there are seven factors that should be taken into consideration when choosing a suitable passage to be taught to EFL learners. Among these seven factors is learner's background knowledge. This study attempts to investigate how the existence / absence of this criterion in selecting reading passages may affect the performance of EFL learners in reading comprehension classes.

Background Knowledge(Schema Theory) & EFL Reading Comprehension

Text comprehension is a complex cognitive skill in which the reader should grasp meaning by making use of all resources available to him / her from both the text itself and the reader's prior knowledge of the topic of the text. Understanding a text satisfactorily depends on the reader's accurate identification of the words, the reader's knowledge of syntax, analysis of connections between different parts of the text and prior knowledge of the text (Al- Shumaimeri, 2006 : 1; Xiao-hui et .al., 2007 : 18). These resources are obviously shown in Figure (1), which represents the interactive model of reading comprehension designed by Grabe (1988 : 59) in which all these elements or levels of analysis assist the reader in understanding the text.

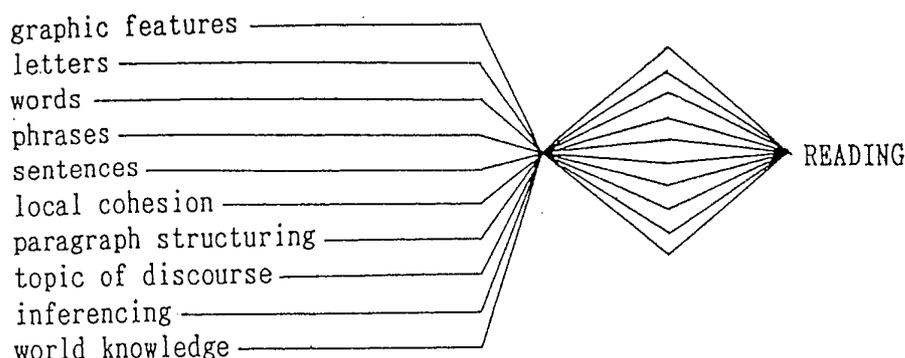


Figure (1) : Reading comprehension levels of analysis
(Adapted from Grabe, 1988:59)

Smith & Holmes (1973 : 50) report that although visual input is necessary for reading to take place, it is proved to be not enough for successful comprehension. According to them, non – visual information, or what the brain imposes upon the eye has generally been known as background knowledge, which has to be of the world, culture and language (in Sadeghi, 2007 : 199).

Researchers, like Freebody & Anderson (1981 : 84), assert that "*background knowledge is crucial for reading comprehension*". Similarly, other researchers show that differences in background knowledge may indeed justify the significant variance in comprehension performances among readers (Jenkins & Pany, 1981 : 167), and that such differences affect the ease or difficulty with which the learner understands a text (Singhal, 1998 : 2). This clearly indicates that background knowledge is considered to be more influential in reading comprehension than linguistic knowledge. Swaffer (1988 : 21) and Yazdanpanah (2007 : 66) state that topic familiarity facilitates language recognition, recall of concepts and inferential reasoning.

The role of topic familiarity (other labels used are prior knowledge, background knowledge, and content familiarity) in reading comprehension has been formalized as schema theory (Carrell and Eisterhold, 1983 : 556). It has as one of its fundamental tenets that text, any text, either spoken or written, does not by itself carry meaning. Rather, according to schema theory, a text only provides directions for listeners or readers as to how they should retrieve or construct meaning from their own previously acquired knowledge which is called the reader's background knowledge, and the previously acquired knowledge structures are called schemata. Researchers who deal with the acquisition of reading in both first and foreign / second languages are now heavily influenced by schema-theoretic models of the reading process. According to schema-theoretic view, reading is no longer a passive skill for the reader plays a very active role in reading, and comprehending a text is an active process involving the reader's existing background knowledge and the text. The meaning of the text does not reside in the material itself but in the interaction that takes place between the reader and the text. Obviously, fundamental to text comprehension is the reader's ability to organize information and

connect new knowledge to the knowledge he / she already possesses (Carrell and Eisterhold, 1983 : 553; Chen and Graves, 1995 : 663).

Schema is an abstract structure of knowledge. It is the prior knowledge gained through experiences stored in one's mind (Xiao-hui et. al., 2007 : 18). Cook (1997:.86) defines the concept of schemata as "*a mental representation of a typical instance which helps people to make sense of the world more quickly because people understand new experiences by activating relevant schema in their mind.*" Widdowson (1983 : 34) has described schema as "*a cognitive structure constructs which allow for the organization of information in long term memory.*"

Originally, schema theory in the current sense comes from cognitive psychology and is most frequently attributed to the British psychologist Frederick Barlett (1932) although Barlett himself credits the idea to an earlier researcher(Rumelhart, 1981 : 3). In Philosophy, the use of the word 'schema' goes back to Kant (the German word is also 'schema') (Maciel, 2004 : 1). Schemata, the plural form of schema, are known as "*building blocks of cognition*" (Rumelhart, 1981 : 3). They refer to the abstract knowledge structures stored in memory.

Comprehending a text, according to schema theory, 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. Comprehending words, sentences, and entire texts involves more than just relying on one's linguistic knowledge since, as Anderson et al. (1977 : 369) point out, "*every act of comprehension involves one's knowledge of the world as well*". The schema theory involves that knowledge is organized into units, which are the schemata. In addition to knowledge itself, how information is employed is stored in these units. Text comprehension requires activating the relevant schemata and progresses through a continuous process of testing the activated

schemata, evaluating their appropriateness and refining or discarding them (Johnston, 1983 : 17; Rumelhart, 1984 : 3 – 6).

Reading can be regarded as the ability to gather meaning from printed symbols, taking into account both the individual's level of reading and purpose for reading. In teaching practice, reading must be defined in accordance with students' levels of reading in order to meet their proper needs. For beginners, recognizing words and comprehending literal meaning are important components of reading. For intermediate readers, reading contains a deeper understanding of texts in terms of the main ideas and textual organization, etc. For advanced readers, reading includes not only interpretation but also critical evaluation. The schemata or old information, which perform the role of scaffolding the new information (Garner, 1987 : 7), are activated to make new incoming information comprehensible. Alderson (2000 : 17) states that schemata functions as filters for the new information.

The importance of schematic knowledge is now widely acknowledged in foreign / second language teaching. Many researches in the schema-oriented realm of ESL/EFL reading have been carried out for it proves to be extremely useful in describing how prior knowledge or topic familiarity is integrated in memory and used in higher – level memory processes in spite of the fact that this theory is not a well – defined framework for the mental representation of knowledge (Grabe, 1991 : 389).

There are three major types of schemata, namely, linguistic schemata, formal schemata and content schemata, which are closely related to reading comprehension.

1. Linguistic schemata involve the readers' language proficiency in vocabulary, grammar and sentence structure. Language knowledge forms the basis of comprehension as it plays an important role in understanding a text, especially for learners at the elementary stage of learning. Without basic language knowledge, no reading strategy or skill can function effectively. Therefore, the more language schemata readers have in their mind, the more information readers may acquire from the text, and the more effective readers they may become (Xiao-hui et al., 2007: 18 – 20).

2. **Formal Schemata** represent the knowledge the reader has about the organizational forms and rhetorical structures of written texts (Carrell, 1987 : 461). They include knowledge of different text types and genres, and also include the knowledge that different types of texts manipulate factors like text organization, language structures, vocabulary, grammar and level of formality differently. When a reader identifies a piece of writing as a persuasive essay and not a descriptive one, for instance, he / she is using formal schema. Formal schemata are proved to be essential for readers of English as a foreign language when encountering different types of texts. Readers use their schematic representations of the text such as fictions, poems, essays, newspaper articles, academic articles in magazines and journals to help comprehend the information in the text. Studies show that the knowledge of what type and genre the text is can facilitate reading comprehension for readers because the type of the text will offer detailed evidence of the content of the text. However, formal schemata may not have the same degree of importance as the next type of schemata, viz. content schemata.

3. **Content Schemata** refer to the background knowledge the reader brings to the text. In other words, they represent the reader's knowledge of the content area of a text, or the topic the text talks about . They include topic familiarity, cultural knowledge and all the chunks of information the reader has collected through a lifetime of direct and indirect experience, which Carrell (1987 : 461) finds to be so much affected by the reader's mother culture.. Content schemata deal with the knowledge relative to the content domain of the text, which is the key to the understanding of texts since language is not only the simple combination of vocabulary, sentence structure and grammar but also the bearer of different levels of the language culture. To some extent, content schemata can make up for the lack of language schemata, and thus help learners understand texts by predicting, choosing information and removing ambiguities.

Many studies show that readers' content schemata influence their reading comprehension more greatly than formal schemata. On the whole, the familiarity of the topic has a direct influence on readers' comprehension. The more the reader knows

about the topic, the more easily and quickly he / she gets the information of the text. Therefore, if one wants to be an efficient reader, he / she needs to try to have the knowledge about more fields and topics. Learners with more prior knowledge can better comprehend and remember the text (Xiao-hui et al., 2007: 18 – 20). This type of schemata is the main concern of the present study.

Carrel & Eisterhold (1983 : 82) maintain that the process of understanding a text, according to the schema theory, " *is guided by the principle that every input is mapped against existing schema and all aspects of that schema must be compatible with the input information.*" This principle results in two basic modules of information processing; bottom – up and top – down processing.

Bottom-up model of reading process reflects traditional attitudes toward reading. It is described to be a serial approach, where the reader recognizes the printed word, identifies graphic stimuli, changes them to sound, recognizes words and decodes meaning (Alderson, 2000 : 16). In other words, readers begin with the lowest level, from which the symbols are identified. Strings of symbols are then analyzed into morphological clusters, from which words are recognized and then strings of words are analyzed into phrases and sentences. The meaning of the text is expected to come naturally as the code is broken based on the reader's prior knowledge of linguistic units like vocabulary, grammar, syntax.

Therefore, from the point of view of bottom-up model, accuracy in understanding linguistic units is very significant and the lower-level processing skills in reading are important. This model weakens the significance of reading comprehension because the focus is on the understanding of linguistic knowledge but little attention is paid to schema, i.e. related cultural background, the whole text, etc.

Top-down module, on the other hand, emphasizes the use of readers' real world knowledge in memory. The most influential and comprehensive top-down model is put forward by Kenneth S. Goodman (1967, in Xiao-hui, 2007 : 20), " *The goal of reading is*

constructing meaning in response to text; it requires interactive use of grapho-phonetic, syntactic, and semantic cues to construct meaning". Readers do not read every word, but see through the text in order to be able to guess the meaning of the words or phrases. During this model reading process, readers take in larger units of meaning of the text at a time, match what they already know with the meaning they derive from the text. Top-down processing occurs as the system makes general predictions based on higher level and general schemata. It searches the input for information to fit into these partially satisfied, higher order schemata.

From what is exposed above, it can be concluded that both bottom-up and top-down models have limitations. The recognition of this results in a more comprehensive reading process, namely, the interactive module which is an interaction of both of bottom-up and top-down modules, claiming that prior knowledge and prediction facilitate the processing of input from the text. The interaction in this perspective takes place at three levels: 1) the interaction between lower-level and higher-level skills; 2) between bottom-up processing and top-down processing; and 3) between the background knowledge presupposed in the text and the background of the reader.

Rumelhart (1980, in Xiao-hui, 2007: 20) remarks that interactive reading processing, both bottom-up and top-down processing occur at all levels simultaneously. Readers may employ bottom-up process as a base for comprehending a text and then turn to top-down process to execute high-level interpretation of the content of the text. Prediction of the content will be confirmed, revised or rejected through further data analysis. Interactive model of reading process is the combination of bottom-up and top-down modules, and thus absorbs their merits and avoids the limitations to a great extent. Till now, this is the most effective reading processing. Hence, it is advocated by many researchers.

Literature Review

Background knowledge seems to play a very significant role in comprehending written texts. The earliest study conducted on the impact of reader's prior knowledge (schemata) on reading comprehension was the classical research of Bartlett (1932). In this study, the respondents were asked to read a story and recall a story from a foreign culture. The major finding was that the participants' recall was inaccurate since it was full of distortions as well as additions to and elaborations which caused redundancies (Keshavarz, et al., 2007 : 20).

Investigations of the effects of background knowledge on comprehension have been continued in the form of the seminal works in first language research by Bransford and Johnson, Anderson et al., and Steffensen et al. done in the 1970s. The findings of these studies, that prior knowledge aids comprehension, led foreign / second language (L2) researchers to investigate the same phenomenon (Schmidt-Rinehart, 1994 : 179). In some cases, providing background knowledge seems to help readers at certain proficiency levels but not others. In other cases, the effect of background knowledge was found to be inconclusive. Still in other cases, background knowledge either did not facilitate comprehension or exerted a reverse effect (Al-Shumaimeri, 2006 : 3 – 4).

For example, in Hudson's study (1988), subjects at the beginning and intermediate levels scored much higher when they received prior knowledge treatment. However, the effect was not significant among students at the advanced level. Peretz and Shoham (1990) used multiple –choice questions to test EFL college students' comprehension of topics within or outside their areas of study. Domain knowledge effect was found in the scores of students of humanities and social science, but not in the scores of science and technology. Hammadou (1991) investigated the reading performance of American college students enrolled in French and Italian classes. He found that students in this study recalled more information from the texts rated unfamiliar than from those rated most familiar. On the other hand, Al-Shumaimeri

(2006) explored the relative effects of content familiarity and language ability on low - and high - ability students' comprehension performance. He found that content familiarity and language ability had significantly affected the participating readers' comprehension performance.

In the light of these results, some researchers suggest that the absence of knowledge effects may be attributed to EFL readers' insufficient use of their prior knowledge (Ibid). Carrell (1983 : 466 ; 1984 : 340) find out that EFL readers fail to use background information because they are linguistically bound. The language itself requires so much attention that non-native readers tend to process at the word and sentence level and do not attend to top-level organizational features and background information. Reading involves variable processes including knowledge of language, which is regarded as crucial for reading in L2. Another possibility related to the way the text written is if words used in the text are obscure or abstract, readers will find it difficult to relate the text to what they already know. A third possibility is that foreign language readers' lack of control over vocabulary difficulty leads to their inability to activate the appropriate schema. It has been assumed that readers are unable to use background knowledge because they have not reached what has been termed the *threshold level* necessary for its use. The threshold hypothesis states that L2 readers need to know or reach a certain level of L2 knowledge (vocabulary, structure) so that background knowledge, L1 reading strategies, and skills can be used efficiently to help comprehend the text. This level is obviously not a fixed set of language knowledge that students need. It has been suggested that the threshold level must be reset for each subject or group and each set of tasks.(Al-Shumaimeri , 2006 : 4).

Method

Participants

The participants of this study are 110 undergraduate EFL second stage students at the Depts. of English at both the Colleges of Arts and Education, University of Basra. Only 80 students, depending on the factor of proficiency in English, are chosen to

take part in the main test of the study after taking the *English Language Proficiency Test* . They are equally divided into (40) students from each college. The participants are supposed to be similar in age and years of study since those who failed in the same stage for more than one year are to be excluded. The participants are not equal in proficiency or gender. Proficiency of the participants is to be measured by applying the *Nelson English Language Proficiency Test*. According to the results of this test, the subjects are to be divided into two groups : high and low proficiency learners. Those who score 60 or more are to regarded as having a high proficiency in English and the rest as having a low level of proficiency. The factor of gender is not controlled in the study since the researchers cannot get equal number of males and females in each college. It is noteworthy to mention that the students of English at College of Education are trained to be teachers of English in secondary schools, whereas those of College of Arts study in the department to achieve a bachelor's degree in different specializations related to English, but not teaching it.

The skill of reading comprehension in English as a foreign language is systematically taught in the first and second stages of the two Depts.. Second stage students are chosen in particular to take part in the experiment of the present study since they were thought to be more able than the first stage students in using different strategies, techniques and their background knowledge in responding to the tests of the study.

Making use of background knowledge or topic familiarity is to be studied in terms of the learners' proficiency. Consequently, the (40) respondents from each college are equally divided into (20) high – proficiency and (20) low – proficiency students according to the scores they obtained in the *Nelson English Language proficiency Test*, as mentioned earlier.

Material

Two kinds of materials are used in the present study. First, a 50 – item Nelson English Language Proficiency Test is manipulated in order to select the participants and divide them into two groups; high and low in terms of their language

proficiency (see Appendix A). This multiple – choice test comprises cloze passage, vocabulary, structure and pronunciation. The test consists of 50 items distributed into 8 items for the reading passage, 36 items for structure and vocabulary, and 5 items for pronunciation (Appendix A). The total score of the test is 100 (2 for each item). The participants who score 60 are to be considered of a high proficiency level in English, while those who score less than 60 are of a low proficiency level in English.

Next, two expository passages are selected from McCall – Grabbs *Standard Test Lessons in Reading*. These two passages are chosen since each combines between the descriptive structure and the causation one so as to build up its own argument. The first passage, The Jet Stream, contains (191) words and explains what the jet stream is and how it affects the weather and pilots flying in the United States (Appendix B). The second passage, The Titanic, contains (182) words and portrays the tragedy of the Titanic – what the Titanic was like, what happened to it and what measures were taken after the disaster (Appendix B).

It is assumed that participants are familiar with the story of the Titanic since they are more likely to have seen the movie. On the other hand, the term " jet stream " mainly appears on weather reports in the United States and Canada. Therefore, it is believed that the Iraqi EFL learners may have little, if no, idea about it.

Two sets of questions are made for each passage. So as to determine whether or not the respondents did have a background about the topics of the two passages, pre – and post – reading questions are presented to the subjects. The pre – reading questions require the participants to check whether or not the story of the Titanic and the jet stream are familiar to them. The background knowledge they may have about either one of these topics can be resulted from watching a movie or a report or reading a book related to them. As a further measure, the respondents are required at the end of the test to evaluate their knowledge of the topic on a five – point scale ranging from ' *completely new* ' to ' *completely old* '.

The second set of questions attached to each passage aims at identifying the influence of the existence / absence of the background knowledge on the participants' performance in different activities related to the skill of reading comprehension in foreign language classes. Hence, there are three questions; question (1) is concerned with identifying the meaning of certain words and phrases which are used in the passages themselves. The second question requires the participants to identify the correct sentence depending on what they understand from the passage. The last question demands the respondents to answer question in only one sentence, which they have to form in their own words. It is clear that the questions are designed to achieve a two-fold objective; first to check the participants' abilities in making use of their familiarity with the subject of the passage in inferring or concluding the correct answer. At the same time, they represent an attempt to prove that the absence of topic familiarity would definitely affect the EFL learners' understanding what they read and hinder their success in reading comprehension classes.

The data collection is conducted in the university setting in the two colleges, on normal university days during the reading comprehension classes. The test has been conducted in two sessions, each passage has been answered by the respondents during one session which lasted one academic hour (i.e., 45 minutes). It has to be mentioned that the Titanic passage is to be conducted first followed by the jet stream passage.

The statistical tests used to interpret the results obtained in the study are the percentages and the two – sample with unequal variances T – test . The percentages are to be used to analyse the results of the pre – and post – reading questions for the two passages. They are also employed to comment on the performance of the participants in the two passages. The T – test is used to find out whether there are significant differences in the performance of the groups of the participants in the two passages.

Analysis of Results

Tables (1) and (2) sum up the results of the topic familiarity survey which is implied in the pre – and post – test for each passage. Examining the results exposed, it can be noticed

that almost all the respondents report in the pre – reading questions that the topic of Titanic is familiar to them, mainly through reading about this tragedy or seeing the movie. Furthermore, the results of the post – reading questions come to support this finding since nearly 78 % of the participants find the content of the passage mostly or completely old.

Table (1) : Summary of the participants' responses in the topic familiarity survey for the Titanic passage

Test	Questions	Yes
Pre – test reading questions	1. Have you heard of the name ' Titanic ' ?	97.5 %
	2. Have you read the story of the ' Titanic ' ?	81.3 %
	3. Have you seen the movie ' Titanic ' ?	91.3 %
	4. Have you read any report about the Titanic tragedy ?	31.3 %
Post – test reading question : To me the content of this passage is :	A. completely new information.	5 %
	B. mostly new information.	5 %
	C. half new and half old information.	11. 25 %
	D. mostly old information .	35 %
	E. completely old information.	43. 27 %

For the Search for oil passage, on the other hand, 97 % of the respondents report that they have no idea about how oil is searched for. The results of the post – test reveal that 89 % of the students find the content of this passage mostly or completely new for them. Throughout these results, it can be said that the content of the passage Titanic is familiar to the participants, whereas the content of the second passage on searching for oil is not.

Table (2) : Summary of the participants' responses in the topic familiarity survey for the Jet Stream passage

Test	Questions	Yes
Pre – test reading questions	1. Do you know how oil is searched for ?	2.5 %
	2. Have you read anything about how oil is searched for ?	0 %
	3. Have you seen a report on TV about how oil is searched for ?	2.5 %
Post – test reading question : To me the content of this passage is :	A. completely new information.	81.3 %
	B. mostly new information e.	8.8 %
	C. half new and half old information .	3.8 %
	D. mostly old information.	2.5%
	E. completely old information .	2.5%

Next, the performances of the two groups of participants (high and low proficiency EFL learners) of the colleges of Education and Arts are to be analysed according to their responses in each of the three questions for the two passages.

Question one following the two passages is concerned with examining the respondents' abilities in guessing the meaning of certain words and phrases selected from the two passages themselves depending on the context in which they appear. The null hypothesis that is to be made here is :

Ho = There is no significant difference in the performance of high proficiency and low proficiency students in Q1 of the two passages.

Tables (3) exposes that the null hypothesis is incorrect and has to be rejected for the first passage on Titanic since the calculated t – value, (3.88), is found to be higher than the critical t – value (1.99). However, the null hypothesis is found to be correct for the second passage on searching for oil since the calculated t – value, (1.78), is found to be less than the critical t

– value (1.99). This indicates that both groups of participants, namely the high and low proficiency students, are unable to guess meanings of unknown words and phrases depending on context since the topic of this passage is unfamiliar to them as it is shown in the results of the pre – and post – reading questions above in contrast to the first passage on Titanic for the results of the t – test show a significant difference in performance between the two groups in spite of the fact that the participants do have a prior knowledge about the content of this passage. This finding largely reflects the strong relation between the content familiarity and the inferencing strategies followed by learners in reading comprehension.

Table (3) : The T – Values of the High and Low Proficiency Respondents in Q. 1 of the Two Passages

Passage	Respondents Total No.			Mean		Variance		T - Value	
	H	L	T	H	L	H	L	Calculated	Critical
Titanic	40	40	80	3.9	2.51	1.92	3.04	3.88	1.99
The Jet Stream	40	40	80	0.77	0.65	0.438	0.512	1.12	

Moreover, the performance of the high proficiency participants in Question (1) for the Titanic passage is to be compared with their performance in the same question for the second passage on the jet stream, likewise the same thing is to be done with the low proficiency participants. Hence, the null hypotheses are :

Ho1 = There is no significant difference in the performance of high proficiency in Q1 of the two passages.

Ho2 = There is no significant difference in the performance of low proficiency in Q1 of the two passages.

Tables (4 & 5) show that the above two null hypotheses are to be rejected since the t – values, (10.52; 5.17) for the high and low proficiency respondents respectively are found to be higher

than the critical t – value (2.001717). This indicates that both of he two groups perform differently due to the existence / absence of familiarity factor as far as he topic of he passage is concerned. It is noteworthy to mention that the means of the scores the high proficiency students obtained in question (1) of the Titanic passage reflects the fact that their performance proves to be better than that in question (1) of the second passage due to influence of the topic familiarity as has been discussed previously.

Table (4) : The T – Values of the High Proficiency Respondents in Q. 1 of the Two Passage

Passage	Respondents Total No.	Mean	Variance	T - Value	
				Calculated	Critical
Titanic	40	3.71	1.998	10.517	2.00717
The Jet Stream	40	1.06	0.529		

Table (5) : The T – Values of the Low Proficiency Respondents in Q. 1 of the Two Passage

Passage	Respondents Total No.	Mean	Variance	T - Value	
				Calculated	Critical
Titanic	40	2.55	3.126	5.1695	2.00717
The Jet Stream	40	0.94	0.771		

The same thing can be said about the performance of the participants in questions 2 & 3 of the two passages since they are also concerned with investigating the effect of the topic familiarity of the passage on the participants' abilities in deducing the correct answer. Question no. 2 requires the students to form their answers in one sentence using their own words, while question 3

asks them to identify which sentence is right depending on the information given in the passage.

So. The null hypothesis to be made concerning the performance of the groups in question no. 2 is :

Ho = There is no significant difference in the performance of high proficiency and low proficiency students in Q. 2 of the two passages.

Tables (6) exposes that the null hypothesis is incorrect and has to be rejected for the first passage on Titanic since the calculated t – value, (2.704), is found to be higher than the critical t – value (1.99). Yet, the null hypothesis is found to be correct for the second passage on the jet stream since the calculated t – value, (1.39), is found to be less than the critical t – value, (1.99). This can also be ascribed to the influence of the topic familiarity. Although there is a significant difference in the performance of the two groups in question no. 2 of he Titanic passage, the difference noticed in the means of the scores obtained by the participants do not seem high. This is due to the fact that the respondents were unable to answer this question by using their own words and without copying the answer from the passage. This proves what Carrell (1983) suggests that ESL / EFL readers fail to use background information because they are linguistically bound. In other words, background knowledge or topic familiarity would have no effect since the foreign language learners are unable to use language appropriately to express what they understand from the reading passage. Consequently, most of he participants, especially the high proficiency ones, resort to copy the answer as it is from the passage without using their own word, which leads the researchers to consider such responses to be wrong.

Table (6) : The T – Values of the High and Low Proficiency Respondents in Q. 2 of the Two Passages

Passage	Respondents Total No.			Mean		Variance		T - Value	
	H	L	T	H	L	H	L	Calculated	Critical
Titanic	40	40	80	0.64	0.34	0.297	0.196	2.704	1.99
The Jet Stream	40	40	80	0.42	0.29	0.219	0.136	1.39	

Finally, the results obtained from analyzing the participants' responses to question no. 3 would support the analysis of the above two questions. The null hypothesis used here is :

Ho = There is no significant difference in the performance of high proficiency and low proficiency students in Q. 3 of the two passages.

Identifying which sentence is correct has been found to be an easy job for the two groups of the participants in the first passage on Titanic. So, no significant differences are to be seen in the performance of the two groups. This has resulted from the fact that the topic of Titanic is known beforehand to the participants. Hence, they are able to identify the sentence that contains the correct information between the three sentences given in the question. Consequently, the null hypothesis is to be since the calculated t – value (0.6338), as shown in Table (7), is found to be less than the critical t – value (1.99). Still, the null hypothesis is to be rejected for question no. 3 of the second passage on The Jet Stream since the calculated t – value, (4.6916), is found to be higher than the critical t – value (1.99). The alternative hypothesis is to be formulated instead, which declares that there is a significant difference between the performances of the two groups in their answers to this question of the second passage due to the fact that the topic is not familiar to the respondents.

Table (7) : The T – Values of the High and Low Proficiency Respondents in Q. 3 of the Two Passages

Passage	Respondents Total No.			Mean		Variance		T - Value	
	H	L	T	H	L	H	L	Calculated	Critical
Titanic	40	40	80	0.72	0.66	0.217	0.172	0.6338	1.99
The Jet Stream	40	40	80	0.79	0.3	0.203	0.288	4.6916	

Conclusions

The present study seeks to explore the effect of topic familiarity on text comprehension in English as a second / foreign language. In general, the factor of topic familiarity is found to have significantly influenced the Iraqi EFL learners' overall comprehension performance. In comparison with their performance in the unfamiliar text, those learners tend to respond better and score higher on the familiar text. This finding comes to support the principles of the schema theory. According to this theory, the reader tries to fit the information found in the reading passages with what he / she has stored in mind as background knowledge. If the two are found to match each other, text comprehension is facilitated since the reader here is able to manipulate variable strategies so as to assimilate text information without the need to go through the details of the text.

The learners' inability to fit incoming information to the existing knowledge they already have would definitely hinder the process of text comprehension and reduces the cognitive resources and strategies available to the reader to integrate the ideas in the passage and making information assimilation difficult, if not impossible.

Thus, it can be said that topic familiarity could bridge the gap between high proficiency EFL learners and those with low proficiency since in the two cases no significant differences in performance were found between these two groups. The absence of topic familiarity would not only affect the performance of the learners with low proficiency in English, but also it seems to be

an obstacle to text comprehension for the learners of high proficiency in the language. Consequently, having language ability is not enough to understand any written text, being familiar with the topic or having the minimum degree of prior knowledge about the topic of the reading passage would highly affect the learners' performance in the reading classes. At the same time, having background knowledge about the topic of the text without language ability affect the comprehension process. Understanding the text without being able to express its ideas in correct and simple language has also been found one of the problems that Iraqi EFL learners suffer from. These two situations would highly affect the performance of those learners in the skill of reading comprehension, especially during the exams when the teacher selects a passage without taking the influence of the topic familiarity factor into consideration.

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Appendix A :

Nelson English Language Proficiency Test

I. Choose the correct answer. Only one answer is correct .

My wife’s mother was taken ill two days ago so my wife had to go and look after her. Before...1...my wife said, “I had better where everything is or you...2...know what to do. But my train

is leaving in half an hour's time and I must get to mother's house as soon as I3...." "...4..." I said. "I can look after myself." Now I realize that I.....5...for a map of the house. If I...6...., I would have found all the food I needed. But when my wife...7....back tomorrow, she won't have any dirty dishes to wash up because I...8....in restaurants since she went away.

- | | | |
|--|---|---|
| 1. A. she was leaving
B. that she left
C. leaving
D. to leave | 2. A. shan't
B. shouldn't
C. wouldn't
D. won't | 3. A. can
B. may
C. could
D. might |
| 4. A. Not to mind
B. Don't worry
C. Not too important
D. Don't matter | 5. A. had to ask
B. ought to ask
C. must have asked
D. should have asked | 6. A. had
B. have
C. did
D. would |
| 7. A. comes
B. come
C. shall come
D. will come | 8. A. am eating
B. eat
C. have been eating
D. ate | |

II. Choose the correct answer. Only one answer is correct.

9. He'shis sister.
A. much taller than
B. much taller that
C. much more tall than
D. much more tall that
10. She had three sons, allbecame doctors.
A. of which B. which C. of whom D. who
11. You..... Go now. It's getting late.
A. had rather rather
B. would rather
C. would better
D. had better
12. I'm going to spend a few days with some.....of mine, who live in the north of Scotland.
A. relatives B. familiars C. neighbours D. companies
13. The Outside the house said " no parking ".
A. advice B. signal C. label

14. He has no Of winning.
A. occasion B. luck C. opportunity D. chance
15. Those people over there are speaking a language I don't understand. They must be.....
A. foreign B. strange C. rare D. outlandish
16. I didn't write it. That is not my On the cheque.
A. mark B. letter C. firm D. signature
17. The actors have to Before they appear in front of the strong lights on television.
A. cover up B. paint up C. make up D. do up
18. It's a difficult problem but we must find the answer
- | | | | |
|--------------------------|-----------------------|----------------------|----------------------|
| A. by one way or another | B. somehow or another | C. anyhow or another | D. anyway or another |
|--------------------------|-----------------------|----------------------|----------------------|
19. I want immediately.
A. that this work is made B. this work made C. that this work is done D. this work done
20. He's used to in public.
A. be speaking B. the speaking C. speaking D. speak
21. You can fly to London this evening..... You don't mind changing planes in Paris.
A. provided B. except C. unless D. so far as
22. It's ageshim.
A. that I don't see B. that I didn't see C. ago I saw D. since I saw
23. He made me.....
A. angry B. be angry C. to be angry D. that I got angry
24. Do what you think is right,they say.
A. however B. whatever C. whichever D. for all

25. He arrived late,was annoying.
A. what B. that C. which D. that which
26. His job is yours.
A. the same time as B. as C. alike D. similar to
27. He needs a...
A. few days' rest B. few days rest C. little days' rest D. little days rest
28. Do you know.....the repairs?
A. to do B. how to do C. to make D. how to make
29. We usually have fine weather....summer.
A. at B. on C. in D. while
30. My flat is the third floor of the building.
A. by B. at C. in D. on
31. They live....the other side of the road.
A. in B. on C. for D. by
32. He isn'tto reach the ceiling.
A. so tall B. as tall C. enough tall D. tall enough
33. They treated him.... a king when he won all that money.
A. as B. as being C. like D. like he was
34. I've told him several times but he....doesn't understand.
A. yet B. already C. no longer D. still
35. ...did you go in the car this morning?
A. How far B. How much far C. How long D. How much
36. He'd done that before,....?
A. wouldn't he B. shouldn't he C. hadn't he D. didn't he

37.of them understood him.
A. None B. No one C. Anyone D. Someone
38. It's..... mountain in the world.
A. the more high B. the higher C. the highest D. the most high
39. I'm going to a concert tomorrow evening. So.....
A. I am B. am I C. I will D. will I
40. That's the firm...
A. what we've been dealing with B. we've been dealing with
C. we've been treating with D. what we've been treating with
41. She let the children.....to play.
A. going out B. that they went out C. to go out D. go out
42. It was.....difficult that he couldn't finish it alone.
A. a so difficult work B. a so difficult job C. such a difficult job D. such a difficult work
43. I.....photographs.
A. enjoy taking B. enjoy to take C. amuse taking D. amuse to take
44. I..... me what happened.
A. would like you tell B. would like you to tell C. would like you telling D. would like that you tell
45. he wasn't hungry, he ate a big meal.
A. Although B. In spite C. Unless D. Even

III. In this series of questions, three words have the same sounds but one does not. Choose the one that does not.

46. A. cleared B. feared C. beard D. Heard
47. A. Shoes B. goes C. blows D. knows
48. A. Wait B. state C. great D. heat
49. A. among B. wrong C. rung D. sung
50. A. broad B. load C. showed D. road

Appendix B
Passage 1 : Titanic

Name :

I. Pre – reading questions :

Please answer the following questions with either (Yes) or (No) :

1. Have you heard the name ' Titanic ' ?
2. Have you heard the story of the ' Titanic ' ?
3. Have you seen the movie ' Titanic ' ?
4. Have you read any report about the Titanic tragedy ?

Read the following passage carefully, then answer the questions that follow :

On the night of April 14th, 1912, one of the worst calamities at sea that the world has ever known occurred. The British luxury ship, S. S. Titanic, was on its maiden voyage to the United States. The Titanic was considered the fastest ship afloat and all but unsinkable. Over 2,200 passengers were aboard, many of them the upper class of Europe and America.

In spite of warning messages, the huge ship collided, going at full speed, with an iceberg south of Newfoundland. There were not enough lifeboats to save everyone. Because of the panic, many lifeboats were launched with only a few people aboard. Over 1500 lives were lost. The " safest ship in the world " sank on its very first voyage. To add to the irony of the catastrophe, there was another ship only ten miles away that could have saved hundreds of people. They never heard the SOS because their wireless operator had gone to bed.

As a result of this disaster, patrols were established to locate icebergs and strict rules concerning safety precautions on ships are enforced.

II. Post – reading questions :

Q1. Explain the meaning of the following words and phrases as they are used in the passage :

calamities, occurred, afloat,
collided, lifeboats were launched precautions, enforced.

Q2. Explain in one sentence :

1. How the " safest ship in the world " sank on its very first voyage.

2. The result of the tragedy of Titanic.

Q3. Which of these sentences can be true according to the passage :

1. Because of the Titanic, no ships ever sank.

2. The writer of this passage considered the disaster of the Titanic to be a joke.

3. The sinking of the Titanic was partly caused by not having enough lifeboats.

Q4. Put a circle around the option that you think is the best :

To me, the content of the passage is :

A. completely new information. B. mostly new information.

C. half new and half old information. D. mostly old information.

E. completely old information.

Passage 2 : The Jet Stream

Name :

I. Pre- reading questions :

Please answer the following questions with either (Yes) or (No) :

1. Have you heard of the term " Jet Stream " ?

2. Have you heard or seen anything regarding the Jet Stream ?

3. Have you seen a report about the Jet Stream ?

Read the following passage carefully, then answer the questions that follow :

Just as there are powerful currents like the Gulf Stream in the oceans, there are raging streams of air high in the sky. These are called jet streams. One jet stream blows always from west to east over the United States and is about 100 miles wide. This great

