

# The Relationship between L2 Reading Comprehension and Schema Theory: A Matter of Text Familiarity

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**Abstract**—Readers construct meaning from clues found in a text which is related to the use of background knowledge in understanding the content of the passage. Reading is an interactive process in which readers construct a meaningful representation of text using their schemata. Schema theory describes the process by which readers combine their own background knowledge with the information in a text to comprehend that text. All readers carry different schemata (background information). This is an important concept in EFL teaching and reading tasks are designed to activate the learners' schemata. While it has been known for some time that both content and formal schemata are necessary for a complete understanding of written texts in a reader's first language (L1), and has been suspected to be true in a reader's second language (L2), it is still an area that has been ignored by both researchers and classroom teachers. The first goal of this paper is to define the terms reading, reading comprehension, schema, schema theory. The second goal is to review the nature of second language reading. The third goal is to discuss reading activities. The fourth goal is to review research on text familiarity and reading comprehension. The fifth goal is to give a brief overview of some of the literature that deals with schema theory as part of a reader centered psycholinguistic processing model for both native and non-native readers. The sixth goal is related to the analysis of content schema and its role in L1 L2 reading comprehension. The seventh goal is pertinent to the activation of content schema. The last goal is to discuss the situation of schema theory in EFL reading comprehension, and implications of schema theory in L2 classrooms.

**Index Terms** —Reading comprehension, familiarity, schema theory, content schema

## I. DEFINITION OF TITLE VARIABLES

### A. Definition of Reading

Being defined as the most important academic language skill [18]-[26], [43] point out the special focus that reading receives in foreign language teaching. To them, there are two important reasons for this. First, many foreign language students often have reading as one of their most important goals. Second, various pedagogical purposes help reading to receive this special focus. Although there have been a number of definitions of reading, it is not so easy to define it just in a single sentence. For example, [26] define reading as "the ability to draw meaning from the printed page and interpret this information appropriately."

### B. Definition of Reading Comprehension

Reading comprehension has been defined in many ways over the years. [37] suggests that the overriding purpose to reading is to get the correct message from a text – the message the writer intended for the reader to receive. [22] state that the idea of reading has changed and moved from what was considered a receptive process to what is now an interactive process. Reading can be done using a number of processes that can be divided into two main categories: bottom-up processing and top-down processing. Bottom-up processing refers to the reader obtaining meaning from the letters and words of a text and reconstructing the intended message that way. Top-down processing refers to the reader's ability to look at a text as a whole and to connect and relate it to his existing knowledge base. Both processes are needed to obtain a message from a text.

### C. Definition of Schema

Background knowledge – also prior knowledge – is supposed to consist of two main components: "our assimilated direct experiences of life and its manifold activities, and our assimilated verbal experiences and encounters" [50]. Schemata are accepted as interlocking mental structures representing readers' knowledge [9]-[16]-[27] of ordinary events [36]. In the reading process, readers integrate the new information from the text into their pre-existing schemata [52]. Not only do schemata influence how they recognize information, but also how they store it. According to [27], only after the schema is activated is one able to see or hear, because it fits into patterns that she already knows. The notion of schema is related with the organization of information in the long-term memory that cognitive constructs allow. Schemata is the plural form that refers an individual's background knowledge. A schema is the singular form that refers to one "chunk" of knowledge. A schema is made up of subordinate parts called nodes. [8] explain the basic processes of reading comprehension and develop the notion of schema and its relation to language reading. Anderson and Pearson maintain that "a reader's schemata, or knowledge already stored in memory, function in the process of interpreting new information and allowing it to enter and become a part of the knowledge store (p. 255)." They stated that "a schema is an abstract knowledge structure" and that it "is structured in the sense that it represents relationships among its component parts (p. 259)."

### D. Schema Theory

Schema theory deals with the reading process, where readers are expected to combine their previous experiences with the text they are reading. Since each reader has

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different background knowledge, it is culture specific. Schema theory was developed by the gestalt psychologist Bartlett "...who observed how people, when asked to repeat a story from memory, filled in details which did not occur in the original but conformed to their cultural norms" [21]. [20] formalize the role of background knowledge in language comprehension as schema theory, and claim that any text either spoken or written does not itself carry meaning. [20] claim that "a text only provides directions for readers as to how they should retrieve or construct meaning from their own, previously acquired knowledge." The very important role of background knowledge on reading comprehension is noted by [20]-[7] that a reader's comprehension depends on her ability to relate the information that she gets from the text with her pre-existing background knowledge.

## II. THE NATURE OF SECOND LANGUAGE READING

Reading is regarded as a major source of comprehensible input and as the skill that many serious learners most need to employ [23]. [20] concluded:

1) Our understanding of reading is best considered as an interactive process that takes place between the reader and the text. The basic concept is that the reader reconstructs the text information based in part on the knowledge drawn from the text and in part from the prior knowledge available to the reader.

2) Reading as an interactive process refers to the interaction of many component skills potentially in simultaneous operation; the interaction of these cognitive skills leads to fluent reading comprehension. Simply stated, reading involves both an array of lower-level rapid, automatic identification skills and an array of higher-level comprehension or interpretation skills. [14] Pointed out that L2 reading has often been accused of being a slavish imitation of L1 reading research. L2 reading Process has relied primarily upon explanatory models borrowed from first language research. Bernhardt asserted that in this process the reader can be involved in the construction of meaning from a text, based partly on new information presented by that text and partly on whatever relevant prior knowledge, feelings and opinions that a reader brings to the task of making sense of the printed words. [10] Pointed out that a reading model provides an imagined representation of the reading process. A continuum of two opposing approaches were provided in understanding the reading process, namely, bottom-up and top-down approaches. The major distinction between the approaches is the emphasis given to text-based variables such as vocabulary, syntax, and grammatical structure and reader-based variables such as the reader's background knowledge, cognitive development, strategy use, interest, and purpose [34]. Reading is not merely a receptive process of gathering information from the page in a word-by-word manner [25]. Rather, it is a selective process and characterized as an active process of comprehending.

## III. READING ACTIVITIES

From a more pedagogical standpoint, suggestions have been made to use certain activities for activating readers'

existing schema or at least providing learners with crucial information about the topic they will be reading [2]-[16]. The use of reading activities can promote strategic reading behaviours by students at pre-, while-, and postreading [5] stages. In turn, reading activities can promote interpretation of the text through the interaction between the reader and the text [51] and thus play a vital role in schema activation in order to comprehend and interpret the text better [26]. [24] Noted that our knowledge on the value of these activities mainly stems from pedagogical recommendations or personal experiences and often lacks scientific scrutiny. Only a handful of studies have investigated which is more effective, using a particular activity on the same text or making use of different activities on the same text with different groups of students [24]-[46]. [31] Showed that a combination of previewing and brainstorming is more effective than merely using brainstorming with short stories. [31] Also explored the effectiveness of previewing and providing background knowledge and concluded that previewing is more effective than providing background knowledge. A contrasting finding comes from [48], who found that providing background knowledge could help learners better with their comprehension. Finally, [24] reported that some activities (e.g., a combination of previewing, providing keywords, scanning, skimming, clarifying, asking and answering questions, and drawing conclusions) contributed to the literal comprehension, while others (e.g., a combination of brainstorming, surveying, reciprocal teaching, evaluation, inferring, re-reading, thinking aloud, and discussion), contributed better to the evaluative comprehension of short stories.

## IV. RESEARCH ON TEXT FAMILIARITY AND READING COMPREHENSION

A large amount of studies have been done into how text familiarity impacts reading comprehension [13]-[41]-[46]. Their findings suggested that texts which contain culturally-familiar content schema are easier to process. Other studies have shown similar effects in that participants better comprehended and/or remembered passages that were more familiar to them [6]-[29]-[30]. Further evidence from such studies also suggested that schemata for content affected comprehension and remembering more than did their formal schemata for text organization.[29] investigated the effects of the cultural origin of prose on reading comprehension of 46 Iranian intermediate advanced ESL students at the university level. Half of the subjects read the unadapted English texts of two stories, one from Iranian folklore and one from American folklore, while the other half read the same stories in adapted English. After completing reading, the subjects were asked to do multiple-choice questions to test their reading comprehension. Outcome showed that the cultural origin of the story had a greater effect on comprehension than syntactic or semantic complexity of the text.

In another study conducted in 1982, [30] compared ESL students' recall on a reading passage on Halloween. Seventy-two ESL students at the university level read a passage on the topic of Halloween. The passage contained both unfamiliar and familiar information based on the

subjects' recent experience of the custom. Some subjects studied the meanings for unfamiliar words in the text. Results of recall protocols suggested that prior cultural experience prepared readers for comprehension of the familiar information about Halloween on the passage. However, exposure to the unfamiliar words did not seem to have a significant effect on their reading comprehension. [13] Examined the effects of faulty schemata on reading comprehension. The participants were 125 doing a test of reading comprehension at the end of an advanced English reading course at Haifa University. The final examination consisted of two parts: first section required students to translate five sentences containing vocabulary learned during the course. The second section required them to read two academic texts on abstract topics already read in class. The findings showed that use of wrong schemata or prior knowledge was a significant factor influencing text scores [46] investigated the effects of text familiarity, task type, and language proficiency on university student's test and task performances. A total of 541 Iranian university students took the Task-Based Reading Test (TBRT). Three instruments were used in the present study: The sample version of the IELTS General Training Reading Module, a Self-report Questionnaire, and the Task-Based Reading Test. In the study, text familiarity was one of the independent variables. In order to determine whether the subjects had any prior familiarity with the content of the texts that appeared in the different modules of the TBRT. A self-report questionnaire was developed to collect data. The results showed that their overall test performance was found to be significantly influenced by text familiarity, language proficiency and the interaction between text familiarity and language proficiency. [41] Examined the effects of topic familiarity on passage comprehension and intake, gain and retention of new lexical items from the passages. Ninety-nine adult learners of Spanish read more and less familiar script-based narratives. There appeared to be only a modest significant positive correlation between lexical intake from the more familiar passages and intake from the less familiar passages, the finding also suggested a possible effect of topic familiarity on lexical intake. The related studies reviewed above indicated that although all the variables and factors surrounding the issues of how background knowledge influences reading has not been fully understood, there is an agreement that background knowledge is important, and that content schema plays an integral role in reading comprehension. Overall, readers appeared to have a higher level of comprehension when the content was familiar to them.

#### V. OVERVIEW OF THE SCHEMA THEORY OF READING COMPREHENSION

Research on the theory of schema had great impact on understanding reading comprehension in first and second language. Understanding the role of schema in the reading process provides insights into why students may fail to comprehend text material. When students are familiar with the topic of the text they are reading (content schema), aware of the discourse level and structural make-up of the

genre of the text (formal schema), and skillful in the decoding features needed to recognize words and recognize how they fit together in a sentence (language schema), they are in a better position to comprehend their assigned reading. Deficiency in any of the above schemas will result in a reading comprehension deficit. Students' apparent reading problems may be problems of insufficient background knowledge [content, formal, and linguistic] [18].

A text does not by itself carry meaning. The reader brings information, knowledge, emotion, and culture – that is schemata, to the printed word [16]. Reading is only incidentally visual. More information is contributed by the reader than by the print on the page. This indicates that our understanding of a text depends on how much related schema we, as readers, possess while reading. Consequently, readers' failure or confusion to make sense of a text is caused by their lack of appropriate schemata that can easily fit with the content of the text. This lack of appropriate schemata can be either formal or content-based [16]. [16] defines these two as follows: content schemata includes what we know about people, the world, culture, and the universe, while formal schemata consists of our knowledge about discourse structure. One of the most important schemas that pose immediate threat to students is content, or topical schema. If the topic is outside students' experience or base of knowledge, they are adrift to an unknown sea [1]. In a review of schema theory, [38] focuses on the role of the individual in the comprehension process and how background knowledge and interests influence the reader's interpretation. Each individual has different internal representations for the subject matter of a text.

#### VI. ANALYSIS OF CONTENT SCHEMA AND ITS ROLE IN L1 AND L2 READING COMPREHENSION

The closer the match between the reader's schema and the text, the more comprehension occurs. Comprehension depends on knowledge; that is, relating what we don't know to what we already know. Our understanding of a text depends on how much related schema we possess while reading. Therefore, failure to make sense of a text is caused by the lack of an appropriate schema that can fit within the content of the text. This missing of an appropriate schema can be content, formal or linguistic ones. Content schema refers to the familiarity of the subject matter of the text. It includes an understanding of the topic of the text and the cultural-specific elements needed to interpret it. Content schema is part of the individual's cultural orientation, and since culture affects all aspects of life, it certainly has a major impact on all elements of reading. Some of these elements include things such as types of text, the purpose of reading, the perception of reading, the views of readers in relation to the writers of the text, the level of textual engagement, the value of the spoken word in relation to the written word, types of reading topics. One's cultural orientation seems to be a dominant force in shaping one's reading habits. One of the most obvious reasons why a particular content schema may fail to exist for a reader is that the schema is culturally specific and is not part of a particular reader's cultural background [20]. [29] Surveyed the effects of the language complexity and the culturally

determined background of a text on reading comprehension. Her finding suggested that the level of syntactic and semantic complexity of an English Language text had a lesser effect than the cultural origin of the text on the reading comprehension of foreign language learners. The study displayed strong evidence of the reading content schemata. [19] Distinguished three different dimensions of schemata: linguistic (language knowledge), content (knowledge of the topic), and formal (previous knowledge of the rhetorical structures of different types of texts). [19] Contends that each of these dimensions plays a role in the interaction among the text and the reader and that when one or all are missing, reading can be problematic. In a study that examines text type (stories and essays) and comprehension [28] reports that non-native readers are affected by text type. [4] Examined the relationship between content schemata and reading comprehension for fifth- and sixth-grade readers from three different American cultural groups (Hispanic, Black and White). [40] worked with sixth graders from three American culturally diverse groups (Hispanic, American Indian and Anglo-American). They found that familiarity with the cultural content schematic area of the text facilitates reading comprehension. The use of content schemata, which do not involve cultural specific knowledge-, has also been examined. [15] have shown that subjects find it difficult and sometimes impossible to understand a text when they cannot access its content schematic area if there are not enough clues in the text. They have shown that sometimes a title to the passage or a drawing makes the content schema accessible and, consequently, the passage is understood.

Other studies into L1 reading comprehension also show that world knowledge has strong effects on readers' construction of meaning from a text. Thus, [11] presents evidence through miscues in oral reading that subjects activate content schemata. Thus, miscues are signals of the subjects' predictions on the basis of the content schemata instantiated. For example, as [11] explains, a subject reading a text about a rocket which was fired in the presence of generals read "war" for "roar". He also shows that subjects tend to add information to a text they read when asked to recall it on the basis of the content schema activated. When recalling a text about the launching of a rocket from a desert, they added information about the brightness of the sun in the desert, which seems to be evidence of schema use in reading comprehension. The powerful effect of prior knowledge is also shown in [42] work. They investigated how prior knowledge influences the amount of short-term nonverbal and verbal memory and long-term retention in students of high and low ability in reading comprehension. Sixty-four junior high students were divided into four equal-sized groups on the basis of pre-assessed reading ability (high and low) and pre-assessed amount of existing prior knowledge about baseball (high and low). Each subject silently read an account of a half inning of a baseball game. After reading, each subject recalled the account nonverbally by moving figures and verbally by retelling the story. After an interpolated task, they summarized the game and sorted passage sentences for idea importance. There was a significant main effect for prior knowledge on all measures. No interactions between prior knowledge and ability were

found. [4] suggest that, when prior knowledge is activated that contradicts information in the text, readers may allow prior knowledge to override the text. On the other hand, [39] suggest that a text that specifically refutes impossible misconceptions may result in better comprehension. In either event, world knowledge has strong effects on readers' construction of meaning from a text. Motivated by the first language studies, second language reading researchers have also attempted to examine the effect of knowledge structures on L2 readers' comprehension. With two passages about an Indian wedding and an American wedding, [49] reported that participants read the native culture content-oriented passage faster and recalled a larger amount of information from the native passage. They concluded that differences in existing knowledge about the content of text materials may be an important source of individual differences in reading comprehension.

This effect of the cultural origin of a text on the subject's understanding and recall of information is also shown in [30], who investigated the effect of the cultural origin of prose on the reading comprehension of Iranian intermediate and advanced students of English as a second language at university level. She showed that her subjects could better recall a passage about a subject (Halloween) which they had culturally experienced. She also demonstrated that cohesive links are correctly understood when the reader makes use of appropriate schemata in comprehending a passage. Further, she pointed out that the activation of appropriate content schemata helps L2 readers to cope with unfamiliar lexis. [35] analyzed the oral reading behavior of 15 EFL proficient Iranian readers. Results show that cultural schemata affected the reading comprehension and strategies of EFL-proficient readers reading expository texts. Results also show that helping readers build background knowledge through pre-reading activities helps improve their reading comprehension. A study conducted by [32] to show the effects of familiar context on student's reading comprehension supports the notion that one's comprehension of a text depends on how much relevant prior knowledge the reader has about the subject matter of that particular text. He went further to suggest that students must be made conscious of what is involved in successful reading. In other words, they must activate their content schemata for the recreating of meaning from the text rather than focus on the word-for-word deciphering which characterizes much ESL reading material.

## VII. THE ACTIVATION OF CONTENT SCHEMA

Activation of knowledge structures is vital to the reader because he or she can make predictions about what is going on in a text. The reader makes predictions and actively seeks to confirm his or her schematic sense of what is taking place in a reading passage and if what was predicted is not confirmed, the reader can refine his schema thus making it even more elaborate, more nuanced. This is what schema theorists purport readers are doing all the time when reading in their mother tongues: the text activates a particular schema in the reader's mind; the reader makes logical predictions about the text based on his schematic knowledge; the reader tries to confirm his predictions; and, finally, the

reader refines his schema of the event based on what the text actually provides. The implications of the theory for reading in general are that the more schematic knowledge a reader brings to a reading passage the better he or she is able to make predictions and inferences about a text and the better he or she is able to comprehend it. The reader can only fully comprehend a text if he or she already knows quite a bit about what is in the text. However, what adherents of schema theory are really claiming is not that a reader has a pre-existing knowledge of all the possible knowledge structures a particular text may present, but rather that a reader, to successfully comprehend a text, must have a minimum schematic knowledge of the types of situations that may be encountered. Equipped with this basic framework of knowledge structures a reader can comprehend a text [8]. Anderson and Pearson go on to say that poor readers are poor readers for three reasons: first, they are likely to have gaps in knowledge; second, they will likely have an inadequate understanding of the relationships among the facts they do know about a topic; third, poor readers are less likely to piece together the overall pattern of a text into a coherent representation. In other words, the reader is lacking the necessary schemata required by a text or his schemata are not sufficiently developed for the particular reading task. The EFL learner must deal with both the linguistic complexities of a text such as vocabulary and syntax as well as the content, which may be laden with vaguely familiar, if not wholly unfamiliar target language cultural cues. The challenge for the EFL learner is great [8].

Teachers must be sensitive to potential comprehension difficulties which ESL/EFL readers may encounter with a text due to a lack of familiarity with the culture-specific content the text presumes. Teaching L2 students to read is not achievable by simply choosing any text or reading materials and expecting the students to make sense out of them. ESL reading teachers should realize that the extent to which L2 readers are familiar with the content of the text has a large impact on their reading comprehension [20]. ESL/EFL teachers should also work on minimizing their students' reading difficulties by providing them with familiar contents that include relevant cultural information. The selected reading materials must activate students' relevant schemata which will then lead to a better understanding of what is being read. [20]-[53], and other researchers showed that ESL reading comprehension may be affected not because the ESL readers lack the appropriate schema, but because they fail to activate it.

The importance of background knowledge has three main implications for teachers: first, the teacher must take into account the knowledge on which any written text is based. Second, if a reader is not actively using his/her background knowledge, a significant part of the reading process is not taking place. Third, teachers should have as their principal objective the development of problem-solving, creative, interpretive strategies in which the students can exploit whatever knowledge or resources they may have. Teachers, in teaching students to activate and use their background knowledge, are helping them to become better readers. All of this leads us to the importance of how to take content schema into consideration in our teaching. [53] gives three phases – which he calls the pre-reading

phase, the reading phase, and the post-reading phase - - for teaching reading comprehension. Of these, the most important for building background knowledge is the first, pre-reading phase wherein the instructor has the opportunity to use pictures, slides, movies, games and other such devices to activate and build upon the students' schema. In this phase, students might also be asked to write about their knowledge of the subject and, after writing, discuss their knowledge with other students. In the second phase, reading, the students read about the subject. In this way they continue to build upon their own existing schema. Each time they read on the same subject, their knowledge of the subject becomes greater. Then, through the activities of the third, post-reading phase, they integrate this background into a new schema structure. [33] Suggests two ways to activate the students' schemata. The first, Free Voluntary Reading, is to have the students select and read texts that are of interest to them, with no need to worry about accountability. In other words, reading itself will help build the familiarity necessary to read more advanced books. His second suggestion is to have them read in their first language so as to build up the knowledge base necessary to understand the material in the second language. A student, for example, who has no familiarity with the subject of computers will have trouble understanding a book about computers in the target language (and may, through lack of familiarity with the subject matter, even have trouble understanding it in his/her first language). If, on the other hand, this same student has read a lot about computers in his/her first language, then, since the material would be familiar, the selection in the target language would be easier to understand.

#### VIII. THE ACTIVATION OF IRANIAN EFL LEARNERS' BACKGROUND KNOWLEDGE

Materials in EFL reading classes in Iran are about foreign culture, but the activation of learners' background knowledge has been neglected by the teachers because of the lack of awareness of schema's role in reading comprehension or because of the limitation of class time and textbooks. The aim of many EFL textbooks in Iran is to activate schema by pre-reading activities. There may be limits to the effectiveness of such activities and there may even have been some over-emphasis of the schema perspective and neglect of other areas specifically language proficiency. In some textbooks, the pre-reading activities are basically listening materials in the form of stories, dialogues, and news. These tasks are used to activate readers' background knowledge and they are sometimes beyond learners' language proficiency. These pre-reading activities add extra burden to learners' reading of the real text. Instead of activating their background knowledge, these activities expose learners to another new content area for which pertinent schema has to be built and activated. Therefore, most teachers omit these pre-reading activities and come directly to the real text using the grammar-translation method which is still a bottom-up level of reading. Two questionnaires were given to both the students and the teachers to see if background knowledge is being given attention in Iranian EFL classes. 30 students and 5 teachers

from Lahijan University, Iran participated in the test administration and the results showed the situation mentioned above. Both the students and the teachers believe in the importance of background knowledge in reading comprehension, but because of the heavy course load and time limit, the teachers omit the pre-reading activities intended to activate students' background knowledge. The other complaint is that some reading activities are far beyond students' language proficiency and it is not easy to find proper materials for the teachers to replace the difficult ones in the textbook. Therefore, it is necessary for EFL teachers in Iran to provide appropriate schema activation tasks to attain the goal of activating learners' schema knowledge.

## IX. CONCLUSION

The ability to understand a text is based not only on the reader's linguistic knowledge, but also on general knowledge of the world and the extent to which that knowledge is activated during processing. The results of all ESL/EFL studies and the view of reading comprehension as an interactive process between the reader and the text [44] lead to several implications for the teachers. If the unfamiliar content of a text has an effect on reading comprehension, then it must be considered as a criterion in the selection of reading materials and in the evaluation of reading comprehension. So, knowledge of schema theory is of particular importance to teachers who have a responsibility towards presenting materials for reading instruction. According to schema theory, our background knowledge (schemata) and its pertinence to the text determines the ease or complexity of understanding that text. In other words, no matter how well a reader may know a language, he or she cannot read in that language with good comprehension if the subject matter or the content of the text is one he or she knows absolutely nothing about [20]. The following suggestions are recommended towards reading materials in L2 classrooms:

- a. Reading materials should be really interesting.
- b. Reading materials should be pertinent to the students' English proficiency levels.
- c. Content knowledge should be taken from these materials.
- d. Teachers can design different types of reading activities and materials to increase their students' understanding of these materials.
- e. Teachers should motivate their students in reading these materials.
- f. Teachers should be sensitive to their students' hidden comprehension problems.
- g. Teachers should help their students change their attitudes towards reading.
- h. Teachers should help their students to become independent, self-directed readers.
- j. Teachers should give enough time to their students exercise their understandings of the materials.

## APPENDIXES

### A. APPENDIX 1

Questionnaire for students

- a) Is the background knowledge provided by the teacher difficult to understand? *Yes/No*
- b) Is the background knowledge provided by the teacher enough for your text comprehension? *Yes/No*
- c) Is the background knowledge provided by the teacher enough for your text comprehension? *Yes/No*
- d) Does your teacher provide any background knowledge before starting a new lesson?  
*Often/Sometimes/Seldom/Never*
- e) If your teacher provides any background knowledge before starting a new lesson, do you find it helpful in your comprehension of the new lesson? *Yes/No*
- f) In what form does your teacher provide your background knowledge?  
*Listening to a song/Reading a poem/Describing pictures/Question and answer/Watching a video program/Oral discussion/Listening to a song*
- g) Does your teacher use the reading tasks in the textbook to activate your background knowledge? *Most often/Sometimes/Seldom/Never*

### B. APPENDIX 2

Questionnaire for teachers

- a) Do you provide any background knowledge before each new lesson?  
*Most often/Sometimes/Seldom/Never*
- b) What materials do you use to provide background knowledge?  
*Materials from the textbook/Materials from my own selections*
- c) In what form do you provide background knowledge?  
*Listening to a song/Reading a poem/Describing pictures/Question and answer/Watching a video program/Oral discussion/Listening to a song*
- d) Do you think that the background knowledge activities are acceptable to the students' proficiency?  
*Yes/No/Some are acceptable and others are not*

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