

## The Role of Schema-theory based on Background Knowledge and Graphic Organizer on Enhancing EFL Learners' Listening Comprehension

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Received for publication: 07 September 2016.

Accepted for publication: 12 December 2016.

### Abstract

The main purpose of this study was to investigate the effect of schema-theory based on background knowledge and graphic organizers on the listening comprehension of EFL learners. Initially, 90 male intermediate learners were selected non-randomly for the purpose of this study. Next, they were given a Nelson Proficiency Test the results of which were drawn upon to select a homogeneous pool of sixty five participants. These participants were then divided into two groups. Following that, a pretest was administered to the participants of the two groups to make sure that the two groups were not significantly different in terms of listening comprehension performance. Then, as for the first experimental group GO (Graphic Organizer) tasks were used for all the 5 sessions of treatment. As for the second experimental group before listening to the text, the researchers assisted the participants in activating their background knowledge regarding the topic of the listening material. The whole treatment lasted for 5 sessions. Having finished the treatment sessions, both groups sat for the listening posttest. The results of statistical analysis indicated that both schema related activities and graphic organizers led to improvement of the listening comprehension performance of the participants. Moreover, the results of the independent samples t-test on the posttest scores of the two groups indicated that the participants who received graphic organizers as treatment outperformed the participants in the group which received schema related activities on the listening comprehension posttest.

**Keywords:** Schemata, Schema Theory, Listening Comprehension, Graphic Organizers

### Introduction

Learning English has become one of the most important issues for students in Iran. The importance of English language as an international language has always been a major motivating element in the learning and use of English in Iran, especially as a main tool to acquire information in science, technology as well as for academics purposes and to learn English to be competitive in this information age. Iranian educators are aware of the important need to be literate and get competence in English in order to access the data available and gain a sufficient extent of success in all areas. Furthermore, English language is also employed in different professions and is a major requirement in Iranian academic setting.

The main objective of EFL instruction is to promote students' skills of self-study and lifelong learning in English. Many studies reveal that effective English learning strategies suitable for individuals' need facilitate English learning. Language learning includes four aspects of listening, speaking, reading, and writing. Among these aspects of language learning, listening

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usually proves to be a difficult task for second language students because the listener has to deal with new grammar and vocabulary in addition to pace, clarity, and intonation of the speaker.

Listening comprehension is the ability to comprehend words that are vocalized aloud. It involves listeners in an interactive process where they make meaning through matching what they hear with what they already know. It is a difficult task for learning English because it has to cope with cultural back ground knowledge and distinctive phonological features. As English teachers, we can help our students to maximize their language comprehension and break down the difficulties of listening comprehension by teaching them listening strategies. It is suggested that the use of schema theory is the best way to enhance listening ability since it can draw a close relationship between prior knowledge and the real world interpretation.

Many foreign language learners face challenges and problems related to listening comprehension. Researchers link difficulties to factors associated with characteristics of the listener, task, process, and text (Rubin, 1994). This demanding nature associated with listening is evident in the definition of listening proposed by Purdy (1997). He points out to the complex nature of listening as an “active and dynamic process of attending, perceiving, interpreting, remembering, and responding to the expressed (verbal and nonverbal) needs, concerns, and information offered by other human beings.” (p. 186). Being able to understand the spoken input requires the listener to simultaneously process various kinds of information. According to Vandergrift (1999), comprehending language entails the coordination of sounds, lexical items, grammatical structures, and real world knowledge. Thus, many researchers including Vogely (1999) and Gonen (2009) believe in the complex nature of listening. The empirical studies have identified several factors that make the nature of foreign language listening even more complex (e.g. Underwood, 1989; Long, 1990; Higgins, 1995; Zhao, 1997; Goh, 2000). For example, Underwood (1989) determined the following seven challenging areas that may reduce listening comprehension: having no control over the speed of the spoken language uttered by the speaker, the listening materials are not repeated, vocabulary is limited, sometimes discourse markers are not recognized, listener does not share any contextual knowledge with the speaker, the listener cannot concentrate in a foreign language context, and some established habits such as trying to figure out the meaning of every word.

Listening comprehension requires the linguistic and background information to be processed online (Gonen, 2009) as well as accommodating the uncontrollable speed of delivery. Thus, listening comprehension is concerned with a great amount of mental and cognitive processes (Vandergrift, 1999). Nowadays, the fields of cognitive psychology, artificial intelligence (AI) and linguistics try together to develop theories of comprehension on the basis of learner’s ability to use on their background knowledge (Long & Reseigh, 1989). In this case, new models of listening consider *listening* as an active productive process because the listeners must identify the differences among sounds, comprehend vocabularies and the grammatical structures, absorb the meaning of language input and other prosodic proof from the text, and they have to save the information collected long enough in their head to interpret the setting in which the communication occur. In fact, “listening is a complicated activity and difficult to understand that requires a lot mental exertion” (Holden, 2004, p. 257) in which background knowledge plays a significant role. According to Goodman (1994) reading strategies, especially cognitive and metacognitive strategies, emphasize the mental decoding process in reading such as prediction, guess, inference, analysis, synthesis and assessment. Since listening like reading is an active process we can utilize Goodman's statement in this skill. Listeners with high metacognitive ability are able to take advantage of effective cognitive listening strategies to meet their needs.

One of the goals of this study is to investigate the role of prior knowledge on listening comprehension. On the other hand, out of all of the research-proven instructional strategies used in

the classroom to help students to learn, the use of some instructional strategies such as graphic organizer stand out the most. These instructional methods create an instructional strategy that helps students identify similarities and differences in the information they are presented within their classrooms. The main purpose of this study is to show the enhancement of Iranian EFL learners listening comprehension through the role of schema-theory based on background knowledge and graphic organizer.

Referring to the primary objectives of the study, the following research questions are formulated:

**Q1:** Does training in the use of Graphic Organizers enhance the listening comprehension of EFL learners?

**Q2:** Does activating background knowledge or schemata related to the topic have any significant effect on EFL listening comprehension?

## **Review of Literature**

### ***An overview of graphic organizers***

As Kim, Vaughn, Wanzek and Wei (2004) demonstrated that graphic organizers assist learners by visualizing the textual elements and presenting their relationships through lines or arrows. As Ausubel (as cited in Kim et al, 2004) mentioned that learning happens when learners anchor the new information to their cognitive structure to expand or rearrange it based on new concepts. In this regard, using graphic organizers can aid learners by providing “a meaningful frame work for relating their knowledge to the new information (p.105).In this way graphic organizer resembles to the knowledge map due to use “two-dimensional space to communicate concept relations”.

Although graphic organizer does not have labeled relationships among concepts and just demonstrate the place of information (Katayama & Robinson, 2000, p.120).Therefore, graphic organizers and knowledge maps are more impressive than outlines and lists because of aiding learners to recognize the links among the concepts (Robison,Corliss,Bush,Bera&Tomberlin,2003).

By using graphic organizers and deeply focusing on the structure of the passage ,learners get familiar with discourse of the text and obtain a valuable view of relationship among the words in the hole context (Rostami Sarabi,2012).Regarding to what was mentioned graphic organizers visually display “interrelationships of superordinate and subordinate ideas, using spatial arrangements, geometric shapes, lines, and arrows” to identify the “content structure” and to present the most important links between concepts. Therefore the students are able to omit the unnecessary details which particularly may bewilder poor readers and prevent them to comprehend the key elements of the content (Dicecco & Gleason, 2000, p.307).In this way, learners can utilize them as effective medium for instantly become involved in storing and appraising information used individually, in pair or group work. Based on this view applying graphic organizer is a “student-centered approach” during which learners can “construct meaning, share information, and make presentation to each other”. Through this approach learners can recognize and summarize new information as well as exerting new words “in the way that are meaningful, integrated, value-base and challenging” (Gallavan & Kotter, 2010, p.93).

On the other hand as Zaini, Mokhtar and Nawawi (2010) stated that teachers can benefit from graphic organizers as a way for improving students’ comprehension and increasing their tendency to read the article. The teachers can use graphic organizers as a pre-teaching or post-teaching strategy for the goal of presenting or supporting the important elements in a passage and the way they link to each other. For introducing graphic organizers, the teachers are supposed to “outline the topic, the main ideas are to be explained, and the essential supporting details are

developed”. Obviously after several practices, the learners can create their own graphic organizer and personalize it based on their ideas (Khatib & Faruji, 2012).

Teachers can present them in 6 variable ways consist of hierarchical, conceptual, sequential, evaluative, relational and cyclical. Each of these ways can be match with the organizational pattern of the text, consists of “categories and subcategories, matrix, plot, tree and pyramid (for hierarchical), description, mind map, concept chart (for conceptual), time line, chronology, process/product, cycle graph, line graph (for sequential), agreement scales, satisfaction scales, evaluation chart (for evaluative), fishbone, pie chart, cause/effect, characteristic chart (for relational), and cycle graph, life cycle, repetitive events (for cyclical).

Furthermore teachers can apply graphic organizers at 3 different levels included: Before instruction, during instruction and after instruction. Using graphic organizers before instruction assists students to understand the text effectively. During instruction, it gives students opportunity to think and build the concepts in their minds. And after instruction, aids learners to get the gist of the passage and have general overview. If students are able to link their background knowledge to what has been read and discover the connection between them, the graphic organizers have effectively support learners in the terms of learning process (Sam D& Rajan, 2013).

#### ***Effect of graphic organization on listening comprehension***

Lamb (2003) explains the advantages of graphic organizer as follow:

- Graphic organizers encourage students to think about information in new ways. With graphic organizers, they remove the words and focus on the connections. In fact they reach meaning through form.
- They are great tools for activities that ask students to review concepts and to demonstrate their understanding. They can easily make changes and help students clarify their thinking by taking different perspectives.
- A huge amount of information can be shared on a single picture to provide the “big view” of a topic.
- It is easy to edit, revise, and quickly add to a visual map.
- They can be used as a nice planning instrument from information identification to product development.
- They are great for visual thinkers or those who need to practice their visual thinking.

Hawk’s study (1986) about GO strategy indicated the advantages including an overview of the material to be learned, a reference point for putting new vocabulary and main ideas into orderly patterns, a cue for important information, a visual stimulus for written and verbal.

#### ***Previous Studies***

Chang and Read (2007) studied the effect of key word method on listening comprehension and discovered that after being exposed to the key words found in the listening materials, lower-proficiency students’ attention was often drawn to local cues involving those pre-taught words and consequently failed to catch the overall picture of the spoken text. A study conducted by Chang (2006) revealed that the linguistic threshold for L2 listeners is required in order to help learners to attain to have improvement in listening comprehension.

According to Ermis (2008), graphic organizers serve as a tool to improve learners’ comprehension of nonfiction text. The study conducted by Ermis showed that the pre- and posttest performance of learners who used graphic organizers were significantly better than the performance of learners who were not provided with graphic organizers. It follows that the incorporation of graphic organizers into the routine teaching of curriculum that consists of nonfiction reading would improve learners’ ability to comprehend the text measured by assessments tests.

Graham, Santos, and Vanderplank (2011) found that teachers believe that listening instruction is very difficult. They believe that most teachers in teaching listening utilize the “comprehension approach” proposed by Field (2008, p.26). In a study conducted by Andon and Eckerth (2009), they examined teachers’ beliefs on task-based language teaching (TBLT). They further investigated the ways “published accounts [of TBLT] are reflected in teachers’ pedagogic principles” (p. 286) in ELT context. Four teachers participated in this study. Andon and Eckerth came to the conclusion that their participants were aware of main principles from the TBLT literature but this knowledge was limited to a small number of articles and some of its main themes were reflected in their teaching and discussions of their practice. In a study conducted by Basturkmen (2012), he found out that the level of correspondence between beliefs and practices for experienced teachers is higher than that of novice teachers.

## **Methodology**

### ***Participants***

Initially, a number of 90 male learners majoring in English as a foreign language at intermediate level comprised the original population of this study. They were selected non-randomly due to availability reasons. Following that, the initial 90 participants were given a Nelson general proficiency test, the results of which were used to select a population of 65 learners whose scores lay between one standard deviation above and below the mean. Next, these selected 65 were randomly assigned to two experimental groups. Thus, there were two classes as: GO (Graphic Organizer) group and Schema group. The level of participants' proficiency was determined by the Nelson proficiency test including 50 multiple-choice items which was first administered to the whole subjects. The participants’ age ranged from 19 to 25 and they were mainly university students.

### ***Instrument of the study***

To collect data for this study, the following instruments were used:

*Nelson Proficiency test:* The Nelson proficiency test (series 200 B) was used to assess the subjects’ level of proficiency in English. This test comprised 50 multiple-choice items. For ensuring the subjects homogeneity, having administered General English proficiency test, those subjects whose scores lay between one standard deviation above and below the mean were considered as the main subjects for the purpose of this study.

*Listening Comprehension Pretest and posttest:* The listening comprehension test used for the purpose of this study for pretest as well as posttest was extracted from Preliminary English Test. The listening sections from two different versions (2009, 2011) were administered to the participants as pretest and posttest, respectively. This test is designed by Cambridge ESOL and is an intermediate level proficiency test for adults.

*Graphic Organizer (GO) tasks:* The graphic organizers tasks in this study were used to improve learners’ understanding about the way that the text has been organized. To this end, the researchers as a practice, introductory session asked students to listen to a text and say any words or phrases that came to their mind then he introduced the graphic organizer and explained the speaker’s plan for the audio-text.

*Schema tasks:* Before listening to the text, the instructed assisted the participants in activating their background knowledge regarding the topic of the listening material. To this aim, the researchers asked the participant’s several questions relevant to the topic before playing the audio and the learners were required to answer the questions if they could. The questions used included very general questions to very specific ones relating to the topic.



### ***Procedure***

Initially, 90 male intermediate learners studying at Kish institute were selected non-randomly for the purpose of this study. Following that, they were given a Nelson Proficiency Test the results of which were drawn upon to select a homogeneous pool of sixty five participants whose scores fell between one standard deviation below and above the mean. These participants stayed in their intact classes because of manageability reasons. Following that, a pretest of listening extracted from PET consisting of 25 items which had been piloted was administered to the participants of the two groups and independent samples t-test was run to make sure that the two groups were not significantly different in terms of listening comprehension performance. Next the treatment unfolded in the two experimental groups as follows:

As for the first experimental group, GO tasks were used for all the 5 sessions of treatment. To this end, initially in an introductory practice session, the researchers introduced the concept of graphic organizers and through modeling explicitly taught the participants on how to develop graphic organizers.

As for the second experimental group before listening to the text, the researchers assisted the participants in activating their background knowledge regarding the topic of the listening material. To this aim, the researchers asked the participant's several questions relevant to the topic before playing the audio and the learners were required to answer the questions if they could. The questions used included very general questions to very specific ones relating to the topic.

It is noteworthy that both groups received the same listening materials. However, in one group the graphic organizers were used while in the other group the schema tasks were employed. The whole treatment lasted for 5 sessions.

Having finished the treatment sessions, both groups sat for the listening posttest the results of which were used to answer the research questions.

### **Data Analysis and Results**

To investigate the first null hypothesis of the present study a paired samples t-test was run between the listening pretest and posttest scores of the graphic organizers group. Table 4.5 shows the descriptive statistics of the pretest and posttest listening scores of the graphic organizer group.

**Table 1. Descriptive Statistics of the Listening Pretest and Posttest Scores of the Graphic Organizer Group**

	N	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Listening Pretest Scores GO Group	32	6.00	23.00	15.0625	4.17317	17.415	-.024	.414	-.291	.809
Listening Posttest GO	32	14.00	25.00	20.7188	2.69090	7.241	-.602	.414	.083	.809
Valid N (listwise)	32									

Table 2 displays the paired samples t-test results run between the pretest and posttest scores of the listening comprehension for the graphic organizers group.

**Table 2. Paired Samples T-test results of the Listening Pretest and Posttest Scores of the Graphic Organizer Group**

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Listening Pretest Scores GO Group - Listening Posttest GO	-5.65625	4.26243	.75350	-7.19302	-4.11948	-7.507	31	.000

As given in Table 2, the significance level is 0.000 which is lower than the confidence level of .05 indicating that there is a significant difference between the pretest and posttest scores of the graphic organizer group. Thus, it can be concluded that the use of Graphic Organizers can enhance the listening comprehension of EFL learners.

To explore the second research question of the present study, a paired samples t-test was run between the listening pretest and posttest scores of the schema group. Table 3 displays the descriptive statistics of the pretest and posttest listening scores of the schema group.

**Table 3. Descriptive Statistics of the Listening Pretest and Posttest Scores of the Schema Group**

	N	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Listening Pretest Schema Group	33	6.00	23.00	14.9091	3.74469	14.023	.148	.409	.216	.798
Listening Posttest Schema Group	33	14.00	24.00	18.2424	2.93716	8.627	.109	.409	-.979	.798
Valid N (listwise)	33									

Table 4 illustrates the paired samples t-test results run between the pretest and posttest scores of the listening comprehension for the schema group.

Table 4 shows that the significance level is 0.000 which is lower than the confidence level of .05 proving that there is a significant difference between the pretest and posttest scores of the schema group. Thus, it can be concluded that activating background knowledge related to the topic has a significant effect on EFL learners' listening comprehension.

**Table 4 . Paired Samples T-test Results of the Listening Pretest and Posttest Scores of the Schema Group**

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Listening Pretest Schema Group - Listening Posttest Schema Group	-3.33333	4.03629	.70263	-4.76454	-1.90213	-4.744	32	.000

### Discussions and Conclusion

The current study sought to explore the effect of the use of graphic organizers and schema related to background on the listening comprehension performance of EFL learners. The results of statistical analysis indicated that both schema related activities and graphic organizers led to improvement of the listening comprehension performance of the participants. Moreover, the results of the independent samples t-test on the posttest scores of the two groups indicated that the participants who received graphic organizers as treatment outperformed the participants in the group which received schema related activities on the listening comprehension posttest.

The positive effects of graphic organizers as well as schema activating activities on EFL learning is well documented in many studies done previously (e.g., Engelmann, Davis, & Davis, 1982; Moore & Readence, 1984; Vandergrift, 2006; Rost, 2004). In fact, it has been shown that modeling graphic organizers strategy helps teachers to cultivate their metacognition, and foster their holistic concept of a particular subject for long-term memory which can consequently lead to better comprehension skills (Katayama & Robinson, 2000). In this regard, using graphic organizers can aid learners by providing “a meaningful frame work for relating their knowledge to the new information. In recent years, it has been shown that graphic organizer activities are regarded among the most significant factors affecting comprehension skills (Mealey, 1991). Mealey in his study revealed that graphic organizers enhanced the comprehension skills of the learners.

Moreover, by using graphic organizers and deeply focusing on the structure of the passage, learners get familiar with discourse of the text and obtain a valuable view of relationship among the words in the whole context (Rostami Sarabi, 2012). As Zaini, Mokhtar and Nawawi (2010) stated that teachers can benefit from graphic organizers as a way for improving students' comprehension.

It has been claimed that activation of schemata in the listener's background knowledge to predict and assess or in other words checking compatibility of the new information with previous one is the essential part of comprehension process (Rost, 2004). Schemata facilitate the listening process since listeners are involved in a series of action towards making meaning from the text they listen to, based on their intentions, expectations, inferences, and back ground knowledge. When listeners can successfully match their prior knowledge and experiences with the listening text, listening comprehension takes place.

Content schema or cultural orientation which is concerned with the previous knowledge impact L2 comprehension. Based on the research studies, the application of graphic organizers have been shown to be beneficial to second language comprehension. A study conducted by Carrell



(1987) on students in an intensive English program sought to examine the contribution of graphic organizer. The researchers used the following two texts: a text containing Muslim-related content and the other one contained Catholic-related content. The findings of the study revealed that the participants' comprehension and recall were influenced by schemata so that they could understand and recall the familiar passages better than unfamiliar ones. Carrell (1987) concluded that learners' familiarity with both rhetorical and content form help them to remember the content whereas unfamiliar content poses more challenges for readers compared to unfamiliar rhetoric. In their study, Steffensen and Joag-Dev (1984) used two English passages about weddings. These texts had been written for L2 Indian learners and L1 American learners. The results showed that readers could understand the passage written about their culture better than the unfamiliar passages. Johnson (1981) examined the impact of the cultural background of prose on ESL learners' reading comprehension. A group of these participants read the un-rewritten English tests of two stories (one of them was written in folklore and the other one was in American folklore). The other group read the same stories in rewritten English. The findings showed that the cultural background of the story had a bigger impact on comprehension compared to grammar or semantic difficulty of the text. The study conducted by Meyer (1975) on prose structure with different age groups showed that readers/listeners should possess an organizational structure for the ideas they receive. These readers/listeners make use of the ready-made structure in order to make a connection between segments of the prose passage which match the structural framework. O'Malley and Chamot (1989) maintain that —listening comprehension appears as a dynamic and conscious process thereby the individual constructs meaning through drawing on cues from contextual information and background knowledge, while using multiple strategic resources to satisfy the task requirement. Moreover, as Fang (2008) states —listening comprehension is considered theoretically as a dynamic process through which people focus on particular dimensions of aural input, construct meaning from passages, and then make a connection between what they hear with the available knowledge. Consequently, appropriate schemata should be drawn on during text processing for purpose of facilitating efficient comprehension (Carrell and Eisterhold, 1983). In the context of dynamic system theory (DST), the research conducted by Qiu and Huang (2012) examined the contributions dynamic image schema (DIS) makes to the enhancement of the L2 learners' listening comprehension. The results of this study showed the facilitating role of dynamic theory in L2 learners' listening comprehension. Qiu and Huang (2012) conclude that the construction of DIS enabled L2 learners to arrange listening materials in the basic frameworks which made it easier for them to process information. Besides, DIS provided the participants with a chance to improve L2 learners' ability to refine, organize, categorize, anticipate, and analyze information to achieve meaningful re-configuration of knowledge. This improved their listening comprehension.

These finding corroborate Dunston's (1992) assertion that if instructors provide the readers who are weak in reading proficiency with a model instruction and instruct them how to use graphic organizers, their reading comprehension would improve considerably.

In a study, Dunston (1992) reported that provision of graphic organizers to learners prior to reading improved their reading comprehension and information recall. She also found out that the construction of graphic organizers after reading enhanced the recall of elementary students as well as secondary students' performance on vocabulary and comprehension. She concluded that the graphic organizers had the highest effect when learners had consented to model instruction and training regarding how to use graphic organizers. The readers who were weak in reading proficiency had the same experience. Being provided with a model instruction and being trained on how to use graphic organizers, these learners experienced improved vocabulary and reading comprehension.

Darch, Carnin and Kemeenui (1986) conducted a study on the use of graphic organizers in a social context. The results indicated that learners who had used graphic organizers in a social structure outperformed those who used graphic organizers independently. The series of studies conducted by Moore and Readence (1980) on graphic organizers found that graphic post organizers produced better results than graphic advance organizers.

Graphic organizers provide the learners with the maps which can be used to identify, collect, organize, and analyze information from a variety of resources. Learners can use that knowledge during the development of potential solutions for real-life and challenging problems. Instructors can activate learners' background knowledge, cultivate their metacognition, and promote their holistic notion of a topic for long-term memory by modeling graphic organizers strategy.

### **Implications of the study**

Visual presentations help the learners to understand the potential relationship between the concepts embedded in the text. Within the context of L2 classes, learners need to be provided with the instruction regarding graphic organizers so that they can enhance their ability to comprehend in various listening stages. Teachers can request learners to create concept maps of the text or to think aloud so that their reading comprehension can be examined. Previous knowledge can be useful for the learners with low-level English reading proficiency because such knowledge helps them to predict or work out the meaning of unknown words or sentences in the text. This will allow them to compensate for their insufficient vocabulary by schema strategy, enhancing their self-confidence.

Based on the findings of the present study the following implications are given:

- Teachers should use graphic organizers and schema related activities more in their classes to enhance the listening comprehension performance. Teacher-modeling teaching using the concept maps or creating main words webs by graphic organizers. This can facilitate the activation or construction of learners' previous knowledge to work out, anticipate, or infer the fresh information in the text and to create individual graphic organizers about the text.
- Instruction materials need to be chosen in a way that is appropriate for learners' proficiency levels, motives, and needs. This appropriateness will activate learners' schema or previous knowledge to match the background knowledge in the listening materials with the aim of increasing motivation and comprehension of English listening.
- L2 instructors need to provide learners with cultural knowledge. L2 learners may not have the knowledge required to perceive texts in a culturally authentic, culturally specific way due to the lack of content schema.
- Teacher educators can give more awareness to teacher trainees regarding the usefulness of graphic organizers and schema related activities.
- Material developers should develop materials in which graphic organizers and schema related activities are used more
- Teachers should elaborate on the advantages of graphic organizers and schema related activities so as to encourage the learners to use them more effectively in the learning process.

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