



Using Explicit Declarative Strategies for Developing Secondary School Students' EFL Critical Listening Skills

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Abstract

This study aimed at investigating the effectiveness of using Explicit Declarative Strategies to enhance EFL students' critical listening skills. The study followed thequasi-expermental design. The participants were 35 second-year secondary school students. To identify the most important and required EFL critical listening(CL) skills for the participants, a checklist was developed and validated by some EFL jury members. Pre and post-EFL critical listening skills tests were developed. Students were pre-tested, to determine their entry level of EFL CL skills. Then, they were trained in Explicit Declarative Strategies on how to develop their skills. The post-test was administered to the participants to assess the progress in their level of EFL critical listening skills. Findings of the research revealed that there is a statistically significant difference at the (0.01) level between the mean scores of the experimental group that of the control group in post-administration test in favor of the experimental group.

Keywords: *Explicit Declarative Strategies, Critical Listening Skills*

المستخلص

هدفت هذه الدراسة إلى التحقق من فاعلية استخدام الاستراتيجيات التوضيحية الصريحة لتنمية مهارات الاستماع الناقد لمتعلمي اللغة الإنجليزية كلغة أجنبية. ولقد تم استخدام التصميم الشبه تجريبي ذو المجموعتين (قياسي قبلي وبعدي) . وقد بلغت عينة الدراسة ٣٥ طالبًا في الصف الثاني الثانوي. وقد تم تصميم قائمة بمهارات الاستماع الناقد اللازمة لهؤلاء الطلاب لمعرفة مدى توافر هذه المهارات لديهم ، وتم التحقق من صحتها وتحكيمها من قبل عدد من المحكمين الخبراء والمتخصصين في المناهج وطرق التدريس. وتم تصميم الاختبارات القبالية والبعدية. وتم تطبيق الاختبار القبلي للطلاب ، تم تدريبهم على استخدام الاستراتيجيات التوضيحية الصريحة لتطوير هذه المهارات. تم إجراء الاختبار البعدي لتقييم مدى التقدم في مستوى مهارات الاستماع الناقد للغة الإنجليزية كلغة أجنبية. وقد أثبتت النتائج الدراسة أن هناك فرقاً مهماً إحصائياً عند ٠.٠١ بين المجموعة التجريبية والمجموعة الضابطة لصالح المجموعة التجريبية مما يدل على فاعلية استخدام الاستراتيجيات التوضيحية لتنمية مهارات الاستماع الناقد.

كلمات مفتاحية الإستراتيجيات التوضيحية، مهارات الاستماع الناقد

Introduction

The English language has two types of skills receptive skills and productive skills. Speaking and writing are known as productive skills as they both require some form of language output. Reading and listening are known as receptive skills. Listening is the first language skill. It is vital for interpersonal communication and for making sense of spoken language.

Listening is the ability to identify and understand what the other said. This process involves understanding the accent of the speaker, the pronunciation, the vocabulary, or the grammar the speaker uses, in addition to understanding the meaning (Ardini, 2015). Additionally, listening is one of the four main language skills (along with speaking, reading, and writing), and it plays a vital role in daily life and education (Beheery, 2016; Rajagukguk & Sirait, 2019; Sastromiharjo, Damaianti & Mulyati, 2020; Jia & Hew, 2021).

Critical listening is important in all stages of life. First, it is important for students because as students learn the language, they learn to think (Sullivan, 2009). At school, it enables students to comprehend accurately, analyze critically, and evaluate what has been told in class (Kazu & Demiralp, 2017) as well as help them become decision-makers and never stop to learn. Second, it has become an ability required in different professions as many employers need people who possess the critical listening ability (Ahmad, 2020). The ideal critical listening ability is very important for everyone so that they can make judgments to clarify the information or ideas they receive. Critical listening skills are not only useful in academic activities but also for decision-making problems in daily life activities (Yogaskara & Kurniawan, 2020).

Despite the importance of critical listening skills, it is the most difficult language skill to master. One of the reasons could be that students are not taught how to listen effectively. Another reason could be that the listener cannot refer back to the text, as opposed to a reader, who can usually refer back to clarify understanding. Certain factors have been reported to make listening more contentious. Accent, complex syntactic structures, and fast speech rate are examples of input characteristics. In addition to learner deficiencies such as limited vocabulary, insufficient memory, a lack of listening confidence, and a lack of necessary cultural and background knowledge to understand the topic (Molla & Tesisa, 2017).

Trang (2020) asserted that linguistic factors, cognitive factors and affective factors greatly affect learners' listening skills. Findings from this study have pertinent pedagogical implications. So, an understanding of factors affecting listening can significantly help teachers select appropriate methods for teaching various listening skills. In addition to enhancing a student's motivation toward academic listening.

Memory abilities, higher self-esteem, and academic accomplishment are all linked. The way to retrieve this type of learning is through a strong foundation of rhymes, visualization, mnemonics, music, and discussion. Mind maps or other graphic organizers help students keep their learning bright. Explicit Declarative Strategies can be achieved by allowing students to work in pairs or groups, go to quiet places to reflect on ideas, work on creative projects and learn from a variety of resources (Haghighi, 2012). Some teachers assign students to make a weekly mind map for review with partners using a piece of flip-chart paper. The mind map is organized around a fundamental organizing idea (like an author, a science topic, or a math concept).

A Mind Map is a diagram that is used to organize information visually. It is arranged and illustrates relationships between parts of the whole. It can often be centered on a single concept, which is drawn as an image in the center of a blank page and to which linked illustrations of ideas, such as images, words, and parts of words, are mentioned. Major ideas are directly related to the central concept, and other ideas start from them. Mind Maps can be created by hand as rough notes during a lecture, meeting, or planning session, or as better-quality drawings when more time is available (Arulselvi, 2017).

Polat and Aydın (2020) asserted that making judgments based on cause-and-effect relationships, analyzing available information and conclusions, and the ability be aware of and evaluate one's own and others' cognitive processes are all examples of critical thinking. Critical thinking is achieved when a person judges a message received through communication channels, reviews its ability, and thoroughly interprets this data, according to critical thinking. Through such interpretation, the individual reveals a new idea by engaging their knowledge with their cognitive processes. As a result, critical thinking is a decision-making mechanism that assists people in controlling their ideas.

It can be said that mind mapping is a useful strategy that facilitates the development of critical thinking skills and critical listening (Tsirkunova, 2013 & O'Connell, 2014). It is an effective strategy for the students to

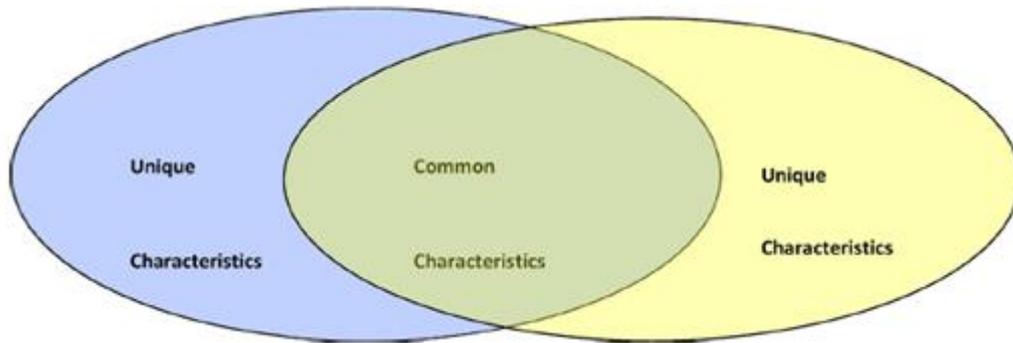
consider if they want to achieve higher levels of attention and creativity, as well as greater organization and clear thinking. The advantages of mind mapping are varied and many. It provides an overview of a large subject/broad topic and allows for a more clear description of it. It encourages one to look at the big picture and explore new possibilities. It allows them to make decisions about the resource material you have for an assignment and where you want to put it. It provides a more appealing and enjoyable form for the eye/brain to look at, ponder, and remember (Arulselvi, 2017).

Students can visualize the process of thinking, understanding, organizing, and applying knowledge by employing mind maps. In addition, connections can be competently organized and established in a short time (Somers et al., 2014). Similarly, the study of (Zhao, Liu, Wang, & Su, 2022) asserted that mind mapping facilitated students' computational thinking skills and critical thinking skills.

The second strategy is graphic organizers(GO). One of the most important goals of teaching is to assist students in becoming strategic and self-directed learners. Regarding (Mede, 2010) research, one method is to explicitly and directly model graphic organizers (GOs) to students, increasing their awareness of what they are, when and where they can be used, and how they are used. Graphic organizers are important and effective teaching strategies for generating and organizing ideas and content, as well as assisting learners' comprehension. Its essence and effectiveness stem from the fact that it allows students to see the relationships, links, and connections between terms, ideas, facts, and information(McKnight, 2010). So, graphic organizers are powerful strategies that enable instructors to interact with learners' schemas. Creating a graphic organizer can be done in two ways selection and organization. The first way, can be considered an organizational strategy because learners have to modify the material they are given into a different format. Second, learners must convert the text into an arranged form of selected keywords and their relationships (Fiorella & Mayer, 2016). So, Students' learning may have been improved to a greater extent if they had received training in the efficient and effective use of graphic organizers. The following figure is an examples of graphic organizers:

Figure (1)

Comparing and contrasting chart

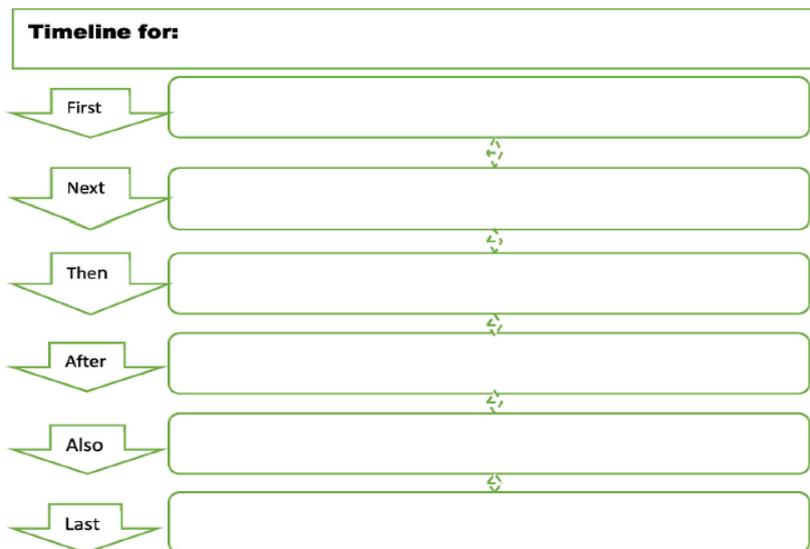


Comparing and contrasting chart from: Enhancing ESL students’ academic achievement in expository essay writing using digital graphic organizers, by Chigbu, et al., 2023, p.4

Graphic organizers serve as templates for what students know and how they know it. GO charts are information visual and graphic representations that arrange logical relationships between facts, concepts, or ideas. GO charts are employed to assist students in displaying and organizing ideas. Students' ideas may become confused and hard to present logically in a draught without them. Furthermore, GO charts enable the full application of brain skill areas, aid in overcoming information overload, and allow the gathering of knowledge and resources in one location (Chigbu, et al., 2023). The following figure is an examples of graphic organizers:

Figure (2)

Sequencing chart



Sequencing chart from: Enhancing ESL students' academic achievement in expository essay writing using digital graphic organizers, by Chigbu, et al., 2023, p.4

Furthermore, students who used graphic organizers in their studies performed better on arranged relations, coordinate connections and the implementation of new knowledge. Moreover, graphic organizers have been shown useful with hypertexts, as they can assist students in organizing macro structure information and developing a logical mental representation. Graphic organizers allow students to focus on the main points of the text and how it is organized (Colliot & Jamet, 2018).

Context and Statement of the Problem

Despite the importance of EFL listening skills among secondary school students, many studies have shown that it has always been a weakness. Al Ghamdi (2012), Sa'ad (2017), Smadi (2017), Ghamry (2018), Mansy (2018), Mohy Aldin (2018), and Alodwan and Almosa (2018) are examples of studies that show weakness of critical listening skills. According to these studies, the primary importance of English instruction is on grammatical aspects and writing abilities rather than listening and speaking skills. As a result, critical listening skills continue to be ignored in English classes. The current study presents explicit declarative strategies for developing EFL critical listening skills (mind map and graphic organizers).

The researcher's experience as an English language teacher for 8 years led her to notice the low level of some EFL critical listening skills in secondary school students. It's also possible that the teachers had difficulty teaching the students some EFL critical listening skills. As a result, both learners and teachers have difficulty learning EFL listening skills.

Consequently, the researcher attempted to determine to what extent second-year secondary school students have poor critical listening skills. As a result, the researcher conducted pilot study to investigate the level of critical listening skills among second-year secondary school students. During the first term of the academic year 2020/2021, the researcher conducted the pilot study on a random sample of 25 second-year secondary-stage students. An EFL critical listening test was adopted from Elgendy (2020)

The results of the pilot study revealed the low level of the students' EFL critical listening skills. According to the pilot study, students'

critical listening skills were low in the following areas: (Making conclusion from the audio , Judging strength and weakness of the evidences heard from the audio material, Judging speech implications whether they are correct or false from the audio text and predicting future incidents according to the speech from the speaker). So, this research used explicit declarative strategies for developing secondary school students' EFL critical listening skills.

Questions of the Research

To face this problem, the present research attempted to answer the following questions:

- 1 What are EFL critical listening skills required for second-year secondary school students?
- 2 What are the features of Explicit Declarative Strategies for developing some EFL critical listening skills among second-year secondary school students?
- 3 To what extent is using Explicit Declarative Strategies effective for developing some EFL critical listening skills among second-year secondary school students?

Method of the study

Participants of The study

The participants of the study were (35) students assigned as the study sample from second-year secondary school.

Instruments and Materials of the Research

The following instruments were developed to measure the dependent variables of the research:

- a) An EFL critical listening skills checklist.
- b) An EFL critical listening skills pre-post tests and rubric.
- c) The explicit declarative strategies.

Validity of the EFL critical listening skills test:

1. Face validity

The EFL critical listening skills test was administered to 11 TEFL jury members to estimate content validity. They were asked to provide feedback on the test instructions' clarity, the test's difficulty level and length, and the extent to which each item measures the skill intended to

be measured. The jury members mentioned the relevance of the test items to the skills to be measured. The test's suitability to students' academic levels was reported. The clarity of the test instructions and questions, as well as the illustration of the targeted skills, were also praised. Clarity of the test instructions and questions and illustrations of the targeted skills were also reported for the final form.

2. Internal consistency validity

The internal consistency between the score of each sub-skill and the total score of the main skill was determined by calculating the Correlation Pearson coefficient between the students' score in each sub-skill and the total score for the main skill. The following table shows the coefficients of validity of the sub-skills of the EFL critical listening test:

Table (1)

The correlation coefficient between the score of each sub-skill and the total score of the main skill for the critical listening test.

No	Main Skills	Sub-Skills	Correlation
1	Listening for Inference	Inferring the meanings of the new vocabulary of the conversation.	0.661**
2		Predicting future incidents according to the speech from the speaker.	0.397*
3		Summarizing main ideas of the audio text.	0.615**
4		Suggesting suitable solutions for problems heard from the given audio.	0.700**
5		Making conclusion from the audio.	0.876**
6	Listening for Evaluation and Judgment	Judging strength and weakness of the evidences heard from the audio material.	0.833**
7		Giving opinions with appropriate reasons.	0.833**
8		Judging characters in the audio according to appropriate criteria.	0.817**
9		Judging speech implications whether they are correct or false from the audio text.	0.835**
10		Evaluating the speaker's ideas and the quality of supporting evidence.	0.893**

The previous table illustrates that all correlation coefficients are significant at the level of significance (0.01), which indicates the validity of the internal consistency between the sub-skills of the test.

Reliability of The EFL Critical Listening Skills Test:

For estimating the reliability of The EFL Critical Listening Skills test, the following two methods were used:

1. Cronbach's Alpha method

Cronbach's alpha coefficient was calculated for the main skills of the test, and for the test as a whole. The results are shown in the following table:

Table (2)

Cronbach's Alpha Coefficient For The Critical Listening Test, The Pre-Test

Test Dimensions	Cronbach's Alpha
Inference	0.744
Evaluation and Judgment	0.857

The previous table shows that the value of Cronbach's alpha coefficient is high, which indicates that the test has a high degree of reliability.

1. Test-Retest Method:

The researcher administered a critical listening skills pre-test at the beginning of the second semester of the academic year 2022-2023 to a group of participants rather than the research sample of second-year secondary school students (n=35). The test was re-administered after two weeks to the same participants.

The correlation coefficient (r) between the mean score of the first and the second administration of the test was measured by using the Pearson formula. The value of the correlation coefficient between the two applications, in each of sub-skills as well as in the test as a whole, was shown in the following table:

Table (3)

Reliability of the EFL critical listening skills test

Test Dimensions	Correlation Coefficient	Level of Significance
Inference	0.799**	0.01
Evaluation and Judgment	0.883*	0.01

Stages of Explicit Declarative Strategies

Stage 1: Pre-exposure.

1. This stage gives the brain an overview of the new learning before getting in. Pre-exposure helps in the development of better conceptual maps in the brain.
2. On the bulletin board, the teacher posts an overview of the new topic. Mind maps are excellent for this.
4. The teacher Establishes a high-interest learning environment.
5. The teacher Encourages students to set their own goals and to discuss class goals for each unit.

Stage 2: Preparation.

1. At this stage, the teacher generates curiosity or excitement.
2. the students learn about the topic's interest value and relevance to them personally. Before they can internalize the knowledge, they must feel connected to it. Encourage them to express their thoughts on whether it is or is not relevant. The brain learns best from concrete experiences first.
3. The teacher includes a surprise or something unique to pique learners' interest.

Stage 3: Initiation and Acquisition.

1. The teacher Offers activities that make use of the majority of the multiple intelligences.
2. The teacher Provides a group or team project that includes creating, discovering, exploring, or designing.
3. the teacher provide enough options for learners to explore the subject using their preferred modality: visual, auditory, kinesthetic, and so on.

Stage 4: Elaboration.

1. This is the processing stage, and it necessitates genuine thinking on the part of the students. Now is the time to make intellectual sense of what you've learned.
2. The teacher conducts an open debriefing of the prior activity.
3. The teacher connects the links so that learning occurs across topics.
4. The students create an evaluation procedure or rubric for their learning (for example, write test questions, facilitate peer reviews, or create mind maps).
5. The teacher views a video, views slides, or attends a theatrical production on the subject.

6. The teacher encourages small-group discussions and has groups report back to the class as a whole. Create individual and/or group mind maps reflecting the new material.

Stage 5: Incubation and Memory Encoding.

1. The teacher encourages students to keep a learning journal.
2. The students go on a walk in pairs to discuss the topic.
3. The teacher Encourages learners to share their new knowledge with their family and friends.

Stage 6: Verification and Confidence Check.

1. At this stage, students must confirm their learning for themselves. When students have a mode or a symbol for the new concepts or materials, they are more likely to remember them.
2. The students present their knowledge to others.
3. The students interview and evaluate one another.
4. The students demonstrate their learning through a project (for example, a working model, mind map, video, or newsletter).
5. The teacher quizzes students (verbally and/or in writing).

Stage 7: Celebration and Integration.

1. It is critical at this point to engage emotions. The teacher makes it enjoyable, lighthearted, and joyful.
2. The students get time for sharing (for example, peer sharing, demonstration, and acknowledgments).
3. The students coordinate a celebration party designed and produced by the class.

The Evaluation of Explicit Declarative Strategies

The evaluation used in the implementation consisted of two types formative and summative.

The formative evaluation was carried out by the researcher during the sessions. The researcher asked the students to read their handouts and complete the tasks that followed the skill that was being emphasized at the end of each session, to ensure that they had mastered it.

The second type was assumptive evaluation. This type was used after the strategies were administered to determine the extent to which the objectives of the strategies were met and to investigate its effectiveness in developing the participants' EFL critical skills through the administration of the EFL critical listening skills post-test.

Findings and Discussion of the Research:

The goal of using explicit declarative strategies was to improve the critical listening skills of EFL secondary school students. Participants' EFL critical listening skills were pre- and post-tested to assess the effectiveness of explicit declarative strategies. The researcher used the two-sample t-test to compare the participants' initial and final mean scores in the overall EFL critical listening skills to see if there was a statistically significant difference between them in the pre-and post-test assessment of the tests. The research findings are presented below, along with the research hypotheses:

Findings of the First Hypothesis:

The first hypothesis states that "there is a statistically significant difference between the mean scores of the participants in the experimental and control groups of EFL inference skills in favour of the experimental group." For testing this hypothesis, the two samples' t-test was used to compare the participants' mean scores in EFL inference skills on the-post administration of the EFL critical listening skills test. Table (4) shows the t-value and level of significance of the treatment between the experimental group and the control group in the post-test of the main skill of critical listening skills.

Table (4)

The t-value and level of significance of the treatment between the experimental group and the control group in the post-test of the main skills of critical listening skills.

Skills	Full Mark	Group	Mean	Std. Deviation	t-value	α Sig	η ²
Listening for inference	6	Experimental	5.19	.75	12.45	0.01	.695
		Control	2.57	.99			

Table (4) shows that there is a statistically significant difference between the mean scores of the experimental group and those of the control group in inference skills in post-test in favor of the experimental group. The t-

value is (12.456) which is significant at the (0.01) level of significance. The effect size is high as η^2 is greater than 0.14. Thus, the first sub-hypothesis was supported.

Findings of the Second Hypothesis:

There is a statistically significant difference between the mean scores of the participants in the experimental and control groups of EFL evaluation and judgment skills in favor of the experimental group. For testing this hypothesis, the two samples' t-test was used to compare the participants' mean scores in EFL evaluation and judgment skills on the post administration of the EFL critical listening skills test in favor of the experimental group. Table (5) illustrates the t-value and level of significance of the treatment between the experimental group and the control group in the post-test of the main skills critical listening skills

Table (5)

The t-value and level of significance of the treatment between the experimental group and the control group in the post-test of the main skills of critical listening skills.

Skills	Full Mark	Group	Mean	Std. Deviation	t-value	α Sig	η^2
evaluation and judgment	21	Experimental	15.74	1.38	38.76	0.01	.957
		Control	5.14	.85			

Findings also indicated that there is a statistically significant difference between the mean scores of the experimental group and those of the control group in evaluation and judgment skills in the post-test in favor of the experimental group. The t-value is (38.766) which is significant at the (0.01) level of significance. The effect size is high as η^2 is greater than 0.14. Thus, the second sub-hypothesis was supported.

Findings of the Third Hypothesis

There is a statistically significant difference between the mean scores of the participants in the experimental and control groups of EFL overall critical listening skills in favor of the experimental group." For testing this hypothesis, the two samples' t-test was used to compare the participants' mean scores in EFL critical listening skills on the post administration of the EFL critical listening skills test in favor of the experimental group. Table (6) illustrates the t-value and level of

significance of the treatment between the experimental group and the control group in the post-test of the critical listening skills.

Table (6)

The T-Value and Level Of Significance Of The Treatment Between The Experimental Group And The Control Group In The Post-Test Of The Overall Critical Listening Skills.

Skills	Full Mark	Group	Mean	Std. Deviation	t-value	α Sig	η^2
Critical listening	27	Experimental	20.93	1.73	35.896	0.01	.957
		Control	7.71	1.31			

Table (6) clarifies that there is a statistically significant difference at the 0.01 level between the mean scores of the experimental group exposed to explicit declarative strategies. strategies and those of the control in the overall post-test of the EFL critical listening skills in favor of the experimental group, where the t-value is (38.775) which is significant at the (0.01) level of significance. The effect size is high as η^2 is greater than 0.14. Thus, the previous hypothesis was supported.

Discussion and Interpretation of the Research Findings Concerning the First Hypothesis

The first hypothesis revealed that there is a statistically significant difference between the mean scores of the participants in the experimental and control groups of EFL evaluation and judgment skills in favor of the experimental group.

The present research aimed to improve EFL inference skills through explicit declarative strategies. The current study's findings are positive because it shows that EFL inference skills were improved and their sub-skills through explicit declarative strategies. This development can be attributed to a variety of factors. One of these factors was related to the nature of explicit declarative strategies. Another important factor is explicit declarative strategies environment. Teaching critical listening skills requires a special environment which is the most important factor and involvement level required of the listeners. Explicit declarative strategies provide a supportive classroom environment that is relatively quiet. It maximizes environments in which the brain learns best.

Mind maps are organized and represent relationships between parts of the whole. Critical listening includes making decisions based on cause-

and-effect relationships, analyzing available information and concluding, and being aware of and evaluating one's own and others' cognitive processes. Thus Mind mapping is an effective strategy for the students to judge if they want to achieve higher levels of attention and creativity. That was appropriate with (Polat & Aydın, 2020).

On the contrary, Colliot and Jamet(2018) used digital graphic organizers to improve reading skills. They used graphic organizers which are a valuable learning tool for students because they allow learners to manage understanding through an examination of connections between concepts. Graphic organizers serve as templates for what students know and how they know it. The researcher allows the students to think and link the relationships between what they know and what they wanted to know. These thoughts develop the ability to predict future incidents according to the speech from the speaker, Suggest suitable solutions for problems heard from the given audio, and Make conclusions from the audio.

Concerning the Second Hypothesis

The findings revealed that there is a statistically significant difference between the mean scores of the participants in the experimental and control groups of EFL evaluation and judgment skills in favor of the experimental group. The present research aimed to improve EFL skills through explicit declarative strategies. The current study's findings are positive because it shows that EFL evaluation and judgment skills were advanced and their sub-skills through explicit declarative strategies. Furthermore, the instructor fosters creativity by allowing students to think more freely and aiding in the accurate analysis of information. They also help students with problem-solving, decision-making, and action while improving memory and understanding. The benefits of this strategy are mostly well-established in native speakers' English classrooms. However, the impact it could be in an EFL classroom requires further consideration. That was convenient with (Chigbu, et al., 2023).

Concerning the Third Hypothesis

The findings of the third hypothesis revealed that there is a statistically significant difference at the 0.01 level between the mean scores of the experimental group exposed to explicit declarative strategies and those of the control in the overall post-test of the EFL critical listening skills in favor of the experimental group, where t-value is (38.775) which is significant at the (0.01) level of significance. The effect size is high as η^2 is greater than 0.14. Thus, the previous hypothesis was supported.

Therefore, after implementing explicit declarative strategies, the secondary school students' critical listening skills were developed and the students could use higher-order thinking skills such as evaluation and judgment. Which is similar to Abo Sharakh(2018) study. The integration between explicit declarative strategies, principles and stages gives the students the chance to explain, describe, make connections, and do active processes. This result is consistent with (El-Naggar, 2019 & Muhammad, 2019). These results met the researcher's expectations and supported the [hypotheses](#) of the study.

This analysis supports the brain-based learning theory which suggests that certain instructional strategies can help address each student's unique combination of intelligence. Explicit declarative strategies are integration between strategies, 12 principles and stages. Declarative strategies helped the students to work in pairs or groups. The students were required to make a weekly mind map for review with partners. These mind maps are organized around a fundamental organizing idea such as the topic character. These strategies help the students to develop discrimination skills and inference skills. This result is proper with (Cortes, 2019).

Conclusion

Acquiring EFL critical listening skills is still something of a mystery. Many students aim at being critical listeners; however, they still face obstacles in learning these skills. Critical listening skills need higher-order thinking skills (HOTS) to have the ability of discrimination and analysis. In addition, critical listening seeks to find mistakes and even the good and correct points of the speech. Critical listening is essential for students inside and outside the classroom. Inside the classroom, the students should be able to distinguish between facts and opinions and accurate from inaccurate ideas.

Thus, it can be argued that brain-based learning offers unique opportunities for students to increase their abilities to learn according to their abilities. Brain-based learning motivates students to learn, encourages achievement, as well as inspires creative thinking and critical listening. BBL develops high-level thinking skills and critical listening. While arranging brain-based learning environments students know themselves and gain self-confidence which reduces anxiety.

References

- Abo Sharakh, L.A.(2018). *The impact of brain-based learning strategy on developing higher order thinking skills in English reading among female tenth graders*. Unpublished Master Thesis. Faculty of Education. Ghaza University. Phalasten.
- Abo Sharakh, L.A.(2018). *The impact of brain-based learning strategy on developing higher order thinking skills in English reading among female tenth graders*. Unpublished Master Thesis. Faculty of Education. Ghaza University. Phalasten.
- Ahmad, S. Z. (2020). Buzz Groups to Develop EFL Students' Critical Listening and Reduce their Oral Communication Apprehension. *Journal of Faculty of Education Menioufia University*. 2(35), 56-91
- Al Ghamdi, S. M. (2012). *Difficulties face saudi EFL learners in the listening skills classroom*. [Unpublished master thesis]. Faculty of Art. De Montfort University. Britain.
- Alodwan, T., & Almosa, M. (2018). The Effect of a Computer Program Based on Analysis, Design, Development, Implementation and Evaluation (ADDIE) in Improving Ninth Graders' Listening and Reading Comprehension Skills in English in Jordan. *English Language Teaching*, 11(4), 43-51.
- Ardini, S. N. (2015). Top-Down and Bottom-Up Processing in Listening. Which one is Problematic?: A Case of Universitas PGRI Semarang. *ETERNAL (English Teaching Journal)*, 6(2).
- Arulselvi, E. (2017). Mind Maps in Classroom Teaching and Learning. *Excellence in Education Journal*, 6(2), 50-65.
- Beheery, F. A. (2016). The Effect of Using some Strategies Based on Collaborative Work on Third Year English Department Students Critical Listening Skills. *Journal of faculty of education*. Ain Shams university. 40(1), 23-56.
- Chigbu, G. U., Emelogu, N. U., Egbe, C. I., Okoyeukwu, N. G., Eze, K. O., Nwafor, C. K., ... & Amunabo, F. A. (2023). Enhancing ESL students' academic achievement in expository essay writing using digital graphic organisers: A mixed-methods research. *Heliyon*.
- Colliot, T., & Jamet, É. (2018). Does self-generating a graphic organizer while reading improve students' learning?. *Computers & Education*, 126, 13-22.
- Cortes, C. S. (2019). *Brain-Based Learning Strategies to Work with ELLs*. Unpublished doctoral dissertation. Greensboro College.

- Elgendy, Y. (2020), Using AudioBook-Based Activities for Developing EFL Secondary Stage Students' Critical Listening Skills and their Attitude towards it. [Unpublished master's Thesis]. Faculty of Education. Mansoura University.
- (2019). [*The Effectiveness of a Brain- Based Learning El-Naggar, N, H. Programme : in Enhancing EFL Secondary School Students' Listening Comprehension and Speaking Skills and Decreasing their Anxiety*](#) . Unpublished dissertation. Faculty of education. Zagazig university.
- Fiorella, L., & Mayer, R. E. (2016). Eight ways to promote generative learning. *Educational Psychology Review*, 28(4), 717–741.
- Ghamry, A. Y. (2018) . A strategy based on podcasting and storytelling to develop some EFL listening comprehension skills among secondary stage students. Unpublished Master Thesis. Faculty of Education. Benha University. Egypt.
- Haghighi, M. (2012). The effect of brain-based learning on Iranian EFL learners' achievement and retention. *Procedia-Social and Behavioral Sciences*, 70, 508-516.
- Jia, C., & Hew, K. F. (2021). Toward a set of Design Principles for Decoding Training: A Systematic Review of Studies of English as a Foreign/Second Language Listening Education. *Educational Research Review*, 100392.
- Kazu, H., & Demiralp, D. (2017). Comparison of critical listening proficiency of teacher candidates in terms of several variables. *Eurasian Journal of Educational Research*, 68, 81-95.
- Mansy, M.A.(2018).Enhancing EFL listening comprehension skills via a blended learning-based program for prep stage students. *Journal of Faculty of Education*. Benha University. Egypt.116 (1),1-21.
- McKnight, K. S. (2010). *The teacher's big book of graphic organizers: 100 reproducible organizers that help kids with reading, writing, and the content areas*. John Wiley & Sons.
- Mede, E. (2010). The effects of instruction of graphic organizers in terms of students' attitudes towards reading in English. *Procedia-Social and Behavioral Sciences*, 2(2), 322-325.

- Muhammad, M, A. (2019). *The Effectiveness of an EFL Brain- Based Learning Program in Enhancing Listening and Reading Comprehension skills of Secondary School Students with Different Learning Styles*. Unpublished dissertation. Faculty of education. Minia University.
- Mohy Aldin, A.M. (2018). The efficiency of using visual elements in developing some listening skills among university students: a case study karary university-college of maritime studies. *Journal of Human Science*. Redsea University. Egypt.
- Molla.B. & Tesisa. G. (2017). Relationship between foreign language listening anxiety and listening comprehension. *International Journal of Foreign Language Teaching & Research*, 5(19), 11-23.
- O'Connell, R. M. (2014). Mind mapping for critical thinking. In L. J. Shedletsky, & J. S. Beaudry (Eds.), *Cases on teaching critical thinking through visual representation strategies* (pp. 354–386). Pennsylvania: IGI Global.
- Polat, Ö., & Aydın, E. (2020). The effect of mind mapping on young children's critical thinking skills. *Thinking Skills and Creativity*, 38, 100743.
- Rajagukguk,H & Sirait, J. (2019). *Critical Listening*. Infogain Publication. Tapanuli, Indonesia.
- Sa'ad, S. (2017). *The effect of using authentic listening materials on promoting students' listening skills at tertiary level*. [Unpublished Master Thesis]. Faculty of Education. Omdurman Islamic University. Sudan.
- Sastromiharjo, A., Damaianti, V. S., & Mulyati, Y. (2020, March). Critical Listening in the Social Organization Community. In *3rd International Conference on Language, Literature, Culture, and Education (ICOLLITE 2019)* (pp. 107-111). Atlantis Press.
- Smadi, .O.M.(2017). *The effect of integration –based instructional strategy on developing EFL students' listening skills at al-al bayet university*.

Unpublished Ph.D Dissertation. Faculty of Education. Yarmooq University. Jordon.

- Somers, M. J., Passerini, K., Parhankangas, A., & Casal, J. (2014). Using mind maps to study how business school students and faculty organize and apply general business knowledge. *International Journal of Management in Education*, 12(1), 1–13. <https://doi.org/10.1016/j.ijme.2013.11.001>
- Sonmez, H. (2019). The strategies for designing activity related to listening/following skills and assessment rubric. *Educational Policy Analysis and Strategic Research*, 14(2), 124-154. Retrieved September 18, 2020 from eric.ed.gov.
- Sullivan, L. (2009). *The SAGE glossary of the social & behavioral sciences*. Thousand Oaks: Sage.
- Trang, M. (2020). Understanding Listening Comprehension Processing and Challenges Encountered: Research Perspectives. *International Journal of English Language and Literature Studies*, 9, (20), 63-75.
- Tsirkunova, S. (2013). Conceptual metaphor as a means for teaching critical thinking skills. *International Journal of Humanities and Social Science*, 3(16), 44–48.
- Yogaskara, H., & Kurniawan, K. (2020, December). The Effect of Implementing Listening Teams Strategy on Students' Critical Listening Ability. In *4th International Conference on Language, Literature, Culture, and Education (ICOLLITE 2020)* (pp. 291-296). Atlantis Press.
- Zhao, L., Liu, X., Wang, C., & Su, Y. S. (2022). Effect of different mind mapping approaches on primary school students' computational thinking skills during visual programming learning. *Computers & Education*, 181, 104445.