



## Using Chunking Strategy for Developing EFL Listening Skills of Secondary School Students

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#### **Abstract**

The current research aimed at developing some EFL listening skills of first-year secondary school students via using chunking strategy. Thirty participants of first-year secondary students were taken from a secondary school in Tala, Menofia. The Participants were subjected to pre/post-tests design. Two main instruments were used: an EFL listening skills checklist and an EFL pre/post listening skills test. For the statistical analysis, t-test for paired samples has been utilized to compare the mean scores of pre and posttest of the obtained data. The program based on using the chunking strategy for developing EFL listening strategy was applied to the participants during the first semester of the scholastic year 2023/2024. Results of the qualitative and quantitive analysis revealed that the participants' EFL listening skills have been developed significantly as a result of using the study program. Therefore, it can be concluded that using chunking strategy is effective in developing EFL listening among first-year secondary school students. The present study may draw the attention of the EFL teachers to use the chunking strategy in the EFL classroom.

**Keywords**: Chunking strategy, listening skills, Secondary school students.

# استخدام استراتيجية التجزئة لتنمية مهارات الاستماع للغة الإنجليزية كلغة أجنبية لدى طلاب المرحلة الثانوية

## ملخص البحث باللغة العربية

استهدف البحث الحالى التعرف على فاعلية استخدام استراتيجية التجزئة فى تنمية مهارة الاستماع للغة الانجليزية كلغة أجنبية لدى طلاب الصف الأول الثانوى من مدرسة بابل الثانوية بمحافظة المنوفية. وقد تم استخدام التصميم التجريبيي من خلال مجموعة تجريبية (قبلى وبعدى). وبلغ عدد أفراد العينة (٣٠) طالب مقيدين بالصف الأول الثانوى. واشتملت أدوات الدراسة على قائمة مهارات الاستماع للغة الانجليزية كلغة أجنبية اللازمة لطلاب الصف الأول الثانوى، وتم الثانوى، واختبار مهارات الاستماع فى اللغة الانجليزية لطلاب الصف الأول الثانوى. وتم تطبيق اختبار الاستماع قبليا على أفراد العينة ، ثم التدريس لهم باستخدام استراتيجية التجزئة، وتم إجراء الدراسة فى الفصل الدراسى الأول من العام الدراسي عن وجود فروق دالة احصائيا بين التطبيق البعدى لاختبار الاستماع. وكشفت نتائج الدراسة عن وجود فروق دالة احصائيا بين متوسطات درجات الطلاب فى القياس القبلي والقياس البعدى على كل المهارات الأساسية مهارات الاستماع للغة الانجليزية، مما يدل على فاعلية استخدام استراتيجية التجزئة فى تنمية مهارات الاستماع للغة الانجليزية كلغة أجنبية لدى طلاب الصف الأول الثانوى. وبناء على النتائج يوصى الباحث باستخدام استراتيجية التجزئة لتنمية مهارات الاستماع في اللغة الانجليزية المتراتيجية التجزئة لتنمية مهارات الاستماع في اللغة الإنجليزية التحرية التجرئة لتنمية مهارات الاستماع في اللغة الانجليزية التحرية التجرئة لتنمية مهارات الاستماع في اللغة الانجليزية.

كلمات مفتاحية: استراتيجية التجزئة ، مهارة الاستماع للغة الانجليزية ، طلاب المرحلة الثانوية

#### Introduction

Oral communication skills involve listening and speaking which are the vital needed skills for all EFL learners. Thus, the mastery of listening and speaking skills have to be a priority for the majority of foreign language learners. Listening is one of the foreign language skills which is essential not only as a receptive skill, but also to its role in developing speaking proficiency. It is the process of language learning which helps learners to have information in order to develop their knowledge for using such language. However, listening is considered the most difficult skill to master. It actually enables students to be active in understanding the various sounds of the language.

Utomo et al., (2019) stated that listening is mainly an active skill rather than a passive one as the human brain is almost active during the process of listening. Knowing the different ways listening is essential for any fruitful communication. Whether it be an interview, a meeting or during a one-on-one conversation one needs to be capable focusing on what the other want to say and responds to what he or she is demanding. Listening includes many skills that could be learned easily. One's ability to listen helps him to communicate effectively in English in real-life situations.

Also, Jannejad, Shkouhi and Haghighi (2012) pointed out that the skill of understanding all types of English, involving some accent and tone features, would also be essential. Listening is not mainly considered a passive skill, rather, it is an active process of building meaning from a stream of connected sounds. Listening comprehension is a more sophisticated skill than any other language skills. Listening has a vital and significant role in communication in every-day life and educational situations. In this context, Hedge (2000) indicated that listening is a very pivotal skill for the person who use and study it. While using verbal communication, one can't communicate with the others without listening to their utterances and understanding what they intend to say. In addition, learners want to listen to what English speakers say at at their natural speed and tries to understands it. They wish to understand English film, TV program, songs, and announcements.

Understanding the listening process can aid students to understand the methods of instruction. Perceptual processing is considered the initial phase of information processing. It represents the encoding of the written

message. It involves segmentation of phonemes of the spoken language from the continuous stream of speech. In this stage, listeners focus their attention mainly on the listening materials. They often use their ability to discriminate sounds, words, and sentences, and store them in short term memory. They pay attention directly and selectively to some specific aspects of the intended task that may be more beneficial in comprehension. These aspects may include pauses and emphasis that give clues to segmenting process. Sounds perceived are temporarily stored in sensory memory. The limitation of the capacity of sensory stores hiders certain word sequences from being retained longer than few information replaces formal information seconds. New immediately. Consequently, attention is directed selectively to the context that will be beneficial in comprehending the oral message. (Bao, 2017).

In addition, Brown (2007) stated some factors which make listening difficult such as grouping the sounds together in spoken language. Due to the memory limitations, there will be and pre-disposition for chunking and clustering. In addition, speech is to be broken down into smaller clusters of words. Spoken language involves a great deal of repletion, redundancy, rephrasing. These features can help reduce the load of information in working memory. That is, speech contains many reduced forms. Such restrictions represent significant difficulties in the listening process. Besides, the rate of delivery help in growing listening The hearer might not have the opportunity to pause the difficulties. stream of the speaker's speech. Instead, the stream of speech may continue to flow so that the hearers are not able to understand the language delivered at such a rate of speed. In fact, stress, intonation and rhythm pose a problem as English, unlike many languages, is a stresstimed language.

In this context, Utomo, Kusmaryati & Sulistyowati (2019) indicated that to students' following of the course book which is selected with adjustment may cause listening problems. If the EFL instructors cannot adopt or adjust the listening activities with the students' listening level, the listening process may create some sort of anxiety and tension for students. The lack of aids and materials may pose another problem in developing the listening skills. The activities designed to foster and enhance listening activities usually start from the word level, sentence

level and then meaning-based level. Listening skill in second language is not developed naturally; rather it needs some kind of information processing such as decoding sounds and word for semantic meaning required for comprehending the spoken language.

Wilson (2008) mentioned that there are some ways to increase listening motivation such as explaining or showing why learning a particular content or skill, allowing student some opportunities to select learning goals, creating or maintaining curiosity, providing games and stimulation, set goals for learning, and helping student develop plan or action. Also, Nemtchinova (2020) stated that effective language teaching is based on providing students with well-planned listening activities that aims at exposing students to the target language as much as possible and communicative speaking activities that help students to produce and practice the target language. Successful listening comprehension enables listeners to acquire information, to communicate successfully, and to achieve academic success. Learners always use their own prior knowledge so as to comprehend the unknown or unfamiliar vocabulary. Another examples for enhancing listening skills is by providing a series of photos showing a sequence of events. Activities may include predicting the relationship among the characters in the listening article.

To conclude, effective language teaching is based on providing EFL students with well-planned listening activities that aims at exposing students to the target language as much as possible and communicative speaking activities that help students to produce and practice the target language. There are some kinds of activities for developing listening. Prelisting activities activates the schemata. It includes brain storming, visual, realia and absorbing the text. A series of photos help the students to tell a story. While listening activities are mainly utilized to polish and consolidate the listening skill. In post listening activities, the teacher asserts that post-listening task requires more time as students deal with thinking, discussing, reflecting and processing. Successful listening comprehension enables listeners to acquire information, to communicate successfully, and to achieve academic success.

Regarding chunking process, some explanations are to be given. A chunk is simply a group of basic units gathered and stored in the long-term memory. Chunking in mainly the process of taking smaller pieces of information and grouping them into bigger units, by taking smaller

pieces of a large whole. Through chunking you can improve the amount remembered. An example is best used when trying to memorize long numbers or breaking down complex topic into relatable chunks. So, chunking can be a learning technique involving the process of breaking down a large piece of content into smaller chunks so as to be easier to be remembered. Consequently, chunking is mainly the clustering of similar or connected items into homogeneous groups which are to be absorded or understood faster and retained in long term memory. Longer words with more than syllables may be learned by breaking down them into smaller units or syllables. For instance, the word "Pomegranate" is probably to be stored in memory as pome-gran-ate. Therefore, chunking can play an essential role in improving the capacity of the memory via retaining huge amount of information for longer periods of time (Utami and Tyas, 2019).

In addition, the chunk is the smallest unified group of thought that one can deal with. Through using chunking, the capacity of working memory in the brain is relieved. Chunks or pieces of connected information are to be remembered easily than single pieces of information. Chunking is the process of grouping of words into small meaningful phrases. Chunking is to be used with more difficult texts of great length. Therefore, chunking can be one of the best techniques to memorize bits of information. One should bear in mind that not all the chunks are of the same level of difficulty. Thus, some pieces of information require more attention than others. That is, chunking activity may involve breaking down difficult texts into more manageable pieces, and having learners to rewrite such chunks using their own words (Norris and Kalm, 2015). In this context, Chekaf, et al. (2014) indicated that chunking process is prerequisite in grouping information into units to be easily dealt with. Chunking is mainly a mnemonic technique which helps people to improve the capacity of their own memory.

The main purpose of chunking process could be retaining information in the working memory through splitting it up into small pieces and regrouping them again. This is due to the limited capacity of the human working memory. The chunking technique can be very fruitful in English learning, and can enhance the span of the working memory. To avoid confusing the brain with band or random information, one should break it into smaller chunks and categorize the connected or similar items.

Thus, it can be said that chunking involves the process of combining separate pieces of information into chunks that require less working memory load in the brain, since each chunk is separately processed as a unit. So, chunking gives people the opportunity to take smaller bits of information, and then combine such bits into more meaningful units which can be more memorable (Chekaf, et al., 2014).

Other kind of acoustic content such as audios or videos could be chunked. One should just remember that the pivotal idea of chucking lies in dividing information into some sort of more distinct groups of related content. For instance, one can chunk the content of the video into more separately accessible pieces with distinct topics. The aim of this process is to allow student to navigate inside the video, so, grouping related information to help remember them later. An interactive video transcript helps chunk, along to navigate the content. Learners can simply scan the text and quickly jump to various points within the video. Such process would help recall out the principal idea of each chunk and better consolidate navigation. Chunking may be harnessed as an every-day activity, however, researchers have found out that one can improve one's ability to chunk information effectively (Mohamed, 2019).

Zafarghandi (2019) examined the effect of utilizing chunking strategy on speaking fluency among Iranian students. The program contains eighteen instructional sessions applied to the experimental group students. Participants were subjected to pre and post-test in reading fluency. The results indicated that the intervention had significantly enhanced speaking fluency among the experimental group students. Besides, there was some sort of direct correspondence between the number of the chunks retained and the speaking fluency of the participants. Also, Utami (2019) investigated the linguistic problems in chunking which were experienced by a group EFL students. The study tries to find out the possible factors related to the problems, that were more related to background of the student in their short-term memory capacity. The findings of the study indicated that such students showed problems in chunking, and they also demonstrated weak performance in linguistic skills. Thus, chunking greatly aids listening comprehension while listening to longer texts.

## **Context of the problem**

Based on the researcher's background in teaching and supervision, he witnessed the moidore level of different students in listening skills. Besides, the lack motivation towards achieving progress in acquiring listening skills. Students do their best to be excellent in reading and writing. Most of the them in secondary schools do not give listening skill the due care, because this skill is not included in the school examinations. Students are seldom given opportunities to practice listening skills or listen to native speakers in class.

Despite the vital role of EFL listening skills for students in secondary schools as indicated earlier, many studies revealed that there is a deficiency in these skills because these skills are not given enough concern at school as elaborated in some previous studies such as (Yousef, 2001; Ali, 2010; Elsiedy, 2011; Abedelhady. Syomwene, 2013; Mansy, 2014 & Youssef, 2019). Most recommendations of these studies indicate that students should be given more emphasis on EFL listening skills in classroom.

For the sake of documenting the problem a pilot study has been conducted. An EFL listening test by Gad (2018) was administered to a sample of 16 first-year secondary school students from Babel Secondary School in Memoufia. The results of applying the test indicated that the scores of the students on the sub skills were: 26.14 % for listening for details, 29.17 % for the gist, 31.03 % for inferences, 25.37 % for prediction and 28.56 % for recognizing the unfamiliar vocabulary. The average score for the whole test was 27.16 %. These results indicate that the students have a low level of performance on the EFL listening skills.

## **Problem statement**

The study problem lies in the low level of EFL listening skills of first-grade secondary school students, therefore, the present study attempts to investigate the effect of using chunking strategy on developing EFL listening skills among first-grade secondary school students.

## Questions of the study

To address the problem, the current study attempts to answer questions below:

- 1. What are the EFL listening skills required for the first-year secondary school students?
- 2. What is the effectiveness of using chunking strategy in developing EFL listening skills among first-year secondary school students?

## **Method**

## **Participants**

Participants of the study were drawn from a secondary school in Menoufia. One experimental group comprised thirty first-year secondary school students enrolled at Babel secondary school in Menofia at the first semester of the academic year 2023/2024.

## **Design**

The present study made use of combining both quantitative and qualitive methods of collecting and manipulating data. In order to conduct the quantitative analysis, pre and post experimental group design was utilized. The participants of the study were exposed to tests before and after conducting the study intervention program. And then, qualitative analyses of the students' performances were provided.

## **Instruments and materials**

- 1. A checklist of EFL listening skills for first-grade secondary school students.
- 2. An EFL listening skills pre/post-test.
- 3. A teacher's guide for implementing chunking strategy for developing EFL listening skills.

## **EFL** listening skills checklist

The checklist of EFL listening skills has been developed to identify the EFL listening skills suitable for the first-grade secondary school students. Therefore, some EFL listening skills tests have been reviewed and checked in the related literature and previous studies, such as such as Jin (2002), Rost (2002), Kim & Kang (2015), Sayin (2015) and Bao (2017).

## **Description of the checklist**

The checklist involved the main EFL skills and subskills suitable for the first-grade secondary school learners. The final version of the checklist included: listening for details, the gist, inferences, prediction, and recognizing the meaning of unfamiliar vocabulary.

## Validity of the checklists

The checklist of the EFL listening skills has been developed and given to a jury professor specialized in EFL curricula and instruction at the Menoufia, Benha and Zagazig faculties of education (n = 10). The jury determined the most significant skills needed for the first-grade secondary school student. The professors were requested to determine whether the EFL listening main skills and subskills were suitable to participants of the study, and to identify the importance of each skill. Jury members provided some recommendations and orientations which the researcher has taken into account, and changed as required, based on their orientations.

## **EFL** listening skills test

## Purpose of the test

The EFL listening skills test was developed to measure the secondary school students' EFL listening main skills (listening for details, listening for the gist, listening for inferences, listening for prediction, and listening for vocabulary) before and after implementing the proposed program.

## **Sources of the test**

The EFL pre and post listening skills tests were developed in light of the national curriculum framework for English for secondary school (2023), in addition to the British Council Listening material available at englishonline.britishcouncil.org. Besides, the researcher made use of the literature review related to the listening skills such as Richards (2008), Kim& Kang (2015), Bao (2017) and Gad (2018).

## **Description of the test**

The test consists of five main parts. In each part of the test students hear a conversation or a talk in English. After they hear the conversation or the talk, they have some written questions. Students will have some multiple-choice questions corresponding to the conversation or talk. Students have to read the four possible answers for each question and decide which one is the correct answer. There are five parts included in the test: Part one: Listening for details, Part two: Listening for the gist, Part three: Listening for drawing inferences, Part four: Listening for prediction, and Part five: Listening for understanding the meaning of unfamiliar words.

## **Test validity**

For the sake of determining the validity of the EFL listening skills test, it has been given to a jury of ten staff members specialized in curriculum and EFL instruction. They were requested to judge the suitability of the test for the students' level in terms of difficulty and length, and decide whether each item can measure the intended subskill. Besides, the professors were requested to decide the appropriateness of the EFL listening skills for the participants of the study, and identify the importance of each skill. They were also requested to add remarks, comment, change or delete the inappropriate part as needed. Jury members gave some recommendations and orientations which the researcher has taken into consideration, and changed as required.

## **Test Reliability**

The test-retest method has been used to investigate the degree of test reliability. The test was administered to twenty-five first-year secondary school students at Tala educational administration, Menoufia. Two weeks later, the same test was given to the same students. The Pearson Correlation Coefficient was calculated and the value was (0.765) for the whole EFL listening test which is significant at (0.01) level.

## The study delimitation

- 1. The study will be limited to:
- 2. A sample of first-grade secondary school students.
- 3. Some listening skills suitable for first-grade secondary students.

#### **Definition of terms**

#### Listening skill

Tyagi (2013) stated that listening skill is the process of receiving sounds and attending to constructing meaning, then responding to oral and verbal messages. It involves recognizing sounds, stress, intonation, guessing, predicting and drawing inferences.

In the present study listening skill will be stated as "the ability of first-grade secondary school students to listen to understand a message focusing on for the gist, details, inferences, predicting and guessing for the meaning of unfamiliar words".

## **Chunking strategy**

Chunking is also defined as the act of breaking a component down into smaller "chunks" of related information. For example, every sentence you are reading is of individual letters that may have been chunked together to form words and a sentence (Guo, 2018).

Chunking can be the process of grouping together of information into ideally sized pieces so they can be used effectively to produce the outcome you want without stress or shutdown (Utami, 2019).

Chunking is a memory mechanism that helps people learn memorize information by breaking it down into smaller pieces (Sargent, 2020).

In this study chunking can be defined as: the ability of first-grade secondary students to integrate separate pieces of information into meaningful whole of chunks, so as to be easy for manipulation in the working memory and later stored in the long-term memory.

#### Results

Results of the study have been presented in the light of the study hypotheses.

The results of the study have been statistically analyzed according to the study hypotheses. (SPSS) has been utilized in the statistical analysis. The paired sample t-test for one experimental group was used. Sex hypotheses were introduced. These main hypotheses represented the five sub hypotheses for the main five EFL listening main skills.

## **Verifying Hypothesis One**

Hypothesis one states that "There is a statically significant difference at the level of (0.05) between the mean scores of in pre and post-test of listening for details skill in favor of the post-test".

The following table indicated that that the t-value was calculated for the paired samples of pre and post-test. The t-value indicates that there is a difference between the mean scores of students in pre and post-test on the listening for details skill. Also,  $(\eta 2)$  was calculated so as to find the effect size of the experimental group treatment on listening for details skill.

**Table (1):** The T -value and significance difference between the pre and post-test of the experimental group on the listening for details skill.

Listoning	Groups	N	Means	S.D	D.F	η2	Sig.	
Listening for details	Pre	30	1.3000	.85231	29	4.539	0.01	0.828
	Post	30	1.9000	.92289	29	4.339	0.01	0.028

The above table shows that there has been a difference that is significant between the mean scores of experimental group in the pretest and post-test of listening for details skill in favor of the post-test since the t- value is (4.539) which is significance at the level of (0.01). Also, the effect size

of the treatment ( $\eta$ 2) amounted to (0.828) which is greater than (0.80). Thus, the first hypothesis is supported.

## **Verifying Hypothesis Two**

Hypothesis two indicates that "There is a statically significant difference at the level of (0.05) between the means in pre test and post-test of listening the gist skill in favor the post-test".

The table below shows that the t-value was calculated for the paired samples of one group. The exact t-value indicates that there is such a difference between the mean scores of students of the experimental group in pre and post in the listening for the gist skill was calculated. The value of effect size  $(\eta 2)$  was calculated so as to find the right effect size of the group treatment on "listening for the gist" skill.

**Table (2):** The t-value and the significance difference between the pre test and post-test of the students on "listening for gist" skill.

		Group	N	Means	S.D	D.F	t-value	Sig.	η2
Listenii for	ng the	Pre	30	1.3667	.63335	29	4.535	0.01	0.827
gist		Post	30	2.0000	.98261	29	4.333	0.01	0.827

The above table indicated that there was a statistically difference between the means of performance of students in the pre and post-test of "listening for the gist" skill in favor of the post-test, since the calculated T-value is (4.535) which is significance at the (0.01) level. In addition, the effect size of the experimental group treatment  $(\eta 2)$  amounted to (0.827) which is greater than (0.80). Thus, the second hypothesis is confirmed.

## Verfying Hypothesis Three

Hypothesis three declares that "There would be a statically difference that is significant at the (0.05) level between the mean scores of in test pre and post-test of listening for drawing inferences skill".

The table below shows that the t-value was calculated for the paired samples for one experimental group. The t-value indicates that there would be a difference in the "listening for drawing inferences" skill. The

size of effect was calculated( $\eta$ 2) so as to find size the experimental group treatment for "listening for drawing inferences" skill.

**Table (3):** The t-value and significance difference on "listening for drawing inferences" skill.

Listening	Group	N	Means	S.D	D.F	t-value	Sig.	η2
for inferences	Pre	30	1.3000	.68755	29	4.490	0.01	0.819
interences	Post	30	2.0667	.98027	2)	4.490	0.01	0.619

The above table shows that there is a statistically difference "listening for drawing inferences" skill, since the t-value is (4.490) which is significance at the (0.01) level. In addition, the effect size of the experimental group treatment  $(\eta 2)$  amounted to (0.819) which is greater than (0.80). Thus, the third hypothesis is supported.

## **Verifying Hypothesis Four**

Hypothesis three says that "There is a statically difference at the (0.05) level between the mean scores of the experimental group in pre and posttest of "listening for prediction" skill in favor of the post-test".

The table below shows that the t-value was calculated for the paired samples of one group. The t-value indicates there is a significant difference between the mean scores of students of the experimental group in pre and post-test on the "listening for prediction" skill. The effect size  $(\eta 2)$  was calculated so as to examine the effect size of the experimental group treatment on listening for prediction skill.

**Table (4):** The t-value and significance difference between the pre and post-test of the experimental group on the listening for details skill.

	Group	N	Means	S.D	D.F	t-value	Sig.	η2
Listening							_	-
for	Pre	30	1.3667	.68992				
prediction					29	4.583	0.01	0.836
F	Post	30	2.0667	.73968	2)	7.505	0.01	0.050

The above table shows that there is a statistically difference between the mean scores of experimental group in the pre and post administrations of listening prediction in favor of the post administration, since the t-value is (4.583) which is significance at the (0.01) level. In addition, the effect

size of the experimental group treatment ( $\eta$ 2) amounted to (0.836) which is higher than (0.80). Thus, the fifth hypothesis is confirmed.

## Verifying Hypothesis Fifth

Hypothesis fifth states that "There is a statically significant difference at the (0.05) level between the mean scores of the experimental group in pre and post-test of listening for vocabulary skill in favor of the post-test".

The table below shows that the t-value was calculated for the paired samples of one group groups. The t-value indicates the differences between the mean scores of students of the experimental group in pre and post-test in the "listening for vocabulary" skill was calculated. The effect size  $(\eta 2)$  was calculated so as to find the effect size of the experimental group treatment on listening "listening for vocabulary" skill.

Table (5): The t-value and significance difference between the pre and post-test of the experimental group on the listening for vocabulary skill.

	Group	N	Means	S.D	D.F	t-value	Sig.	η2
Listening	D	20	1.0667	00000				
for	Pre	30	1.3667	.88992				
vocabulary					29	4.583	0.01	0.836
, 5 540.5 521612 5	Post	30	2.0667	.73968				

The table shows that there is to be a statistically difference between the mean scores of experimental group in the pre and post administrations of listening vocabulary skill in favor of the post-test since the t-value is (4.583) which is significance at the (0.01) level. In addition, the effect size of the experimental group treatment  $(\eta 2)$  amounted to (0.836) which is greater than (0.80). Thus, the fifth hypothesis is accepted.

## Verifying Hypothesis Six

The sixth hypothesis states that "There is a statically significant difference at the (0.05) level between the mean scores of the experimental group in pre and post overall EFL listening test in favor of the post-test".

The table below shows that the t-value was calculated for the paired samples for one group. The t-value indicates the differences between the

mean scores of students of the experimental group in pre and post overall EFL listening as a whole. The effect size  $(\eta 2)$  was calculated so as to find the effect size of the experimental group treatment on listening for vocabulary skill.

**Table (6):** The t-value and significance difference between the pre test and the post-test of the experimental on the listening for vocabulary skill.

	Group	N	Means	S.D	D.F	t-value	Sig.	η2
Overall								
listening	Pre	30	6.7667	3.2872				
skills test					58	4.495	0.01	0.820
SKIIIS test	Post	30	8.9333	3.5905	36	7.773		0.020

The above table shows that there is a statistically difference at the (0.01) between the mean scores of experimental in the pre and post-test of the EFL listening skills test as a whole in favor of the post test. In addition, the effect size of the experimental group treatment  $(\eta 2)$  on listening the performance of EFL listening test as a whole amounted to (0.820) which is greater than (0.80). Thus, hypothesis six was confirmed.

## The Qualitative analysis of the results

Qualitative analysis of the obtained data helps the researcher to get a deeper understanding of what has an influence on the students' EFL listening skills. Qualitative analysis can be interpreted and used in many ways, both to be used as a measure of quality and as the foundation for analysis. The researcher manipulated the findings of the performance of the top level of the students in the EFL listening main skills and explained the main reasons for such improvement in the target skills.

The essential purpose of the qualitative analysis of the results is to have a deeper look at what was happening and what affected the listening skills of the EFL students. In order to have a closer view, the researcher analyzed the performance of five students pre and after the implementation on the main five skills of listening (listening to determine the details, listening for recognizing the main idea, listening to draw inference, listening for sake of prediction and listening to recognize the meaning of new vocabulary).

In addition, the analysis of the obtained findings helps the researcher grasp the apparent improvements in the experimental group

performance. Thus, the results can be discussed based on the hypothesis of the study and the related studies. Thus, the chunking strategy is organized and represented the relationships between parts of the whole listening skills. Listening skills include understanding the main details, grasping the gist of the content, drawing inferences, listening for making prediction and deducing the meaning of the involved unfamiliar vocabulary.

The chunking focuses on changing the students' mentality by equipping them with activities that can be applies to processing incoming instructional presentations and by teaching them how to be engaged in appropriate cognitive processing during learning. The chunking strategy also supported the students and helped them overcome the barrier of acquiring the language fluency and distinguishing between the necessary and unnecessary information one part to another. In addition, the results are indicators and supportive of merging the learning strategies in the English class.

## Listening for the details

When students were first exposed to the audio, they felt worried and they hardly understood the content of the conversation as a whole. Generally speaking, the researcher helped them to concentrate on the details and pay extreme attention to the tone of voice. The researcher began to chunk the listening content into reasonable and understandable segments which can fit the capacity of the working memory. The treatment provided a deep insight into the relationship between information processing strategies and the main skills and subskills of EFL listening.

Broadly speaking, the students began to maintain a high level of concentration and their level answer to the questions would be more accurate chunking strategy was also functioned to help the students how to participate and summarize the oral text. Upon listening to the segments of the audio, students were asked to paraphrase the content orally. In a further step they were asked to summarize the content orally. It was obvious from the post test that students' performance in spotting the main idea was improved significantly.

#### Listening for the gist

In the beginning, students found it difficult to recognize the main idea of the audio content. They were not able to focus on the gist of the passage. When asked to state the main idea of the article, they often give details. The researcher began to encourage students to listen with a purpose in mind. The students should be motivated to chunk on the information included and related to the main idea for the content of the audio. After they listen to the article, the instructor made up many questions based on the topic of the audio. Their questions should concern the core of the passage.

The researcher evaluated their questions and provided feedback. This allowed them to reflect on new ideas of thinking. The researcher discussed with the students on using their text book and other material to generate a particular level of questions.

#### **Listening for drawing inferences**

In the beginning, the students first here the audio, they felt anxious. They found it difficult to infer the incidents of the passage at the real speed of native speakers. They often asked to repeat the audio more than once, and they wanted to listen separate segments at a time. Instead of listening to the whole article one time. Most of them feel uncomfortable with the normal speed of the audio. They needed it to be played much slower. First, the researcher encouraged them to relax. They have to listen with a purpose in mind. He explained the most prominent problems of language. The researcher highlighted and helped the student how to draw inferences about the incidents or events involved in the oral text.

In addition, the various range of vowel sounds with elaborated examples to show the differences between the similar meanings of words and sentences. Then, there was an evident improvement in the students' performance in recognizing the hidden meaning between the lines through utilizing the chunking strategy. The researcher regulated the flow of the listening content so as to be small chunking which can fit into the capacity of the. Dividing the audio into meaningful segments helped the students to grasp the meaning of every chunk separately.

#### **Listening for prediction**

Prediction was considered one of the most difficult listening skills for students to practice. At first, the students found it difficult to predict the coming events in the passage. They often asked to relax and follow the steps of the chunking strategy. At the beginning they asked the researcher to repeat the audio more than once, and they wanted to listen separate segments at a time. Instead of listening to the whole article one time. Most of them feel uncomfortable with the normal speed of the audio. They needed it to be played much slower. First, the researcher encouraged them to relax. They have to listen with a purpose in mind. He explained the most prominent problems of language. The researcher highlighted and helped the student how to draw to predict the coming evens based on the impeded incidents in the article.

## Listening for recognizing unfamiliar vocabulary

Recognizing the meaning of the unfamiliar vocabulary was somewhat difficult for the student before the utilizing the information processing implement, especially, the chunking strategy. Students were asked to find a common link between two or more words included in the audio text. Also, they were asked to paraphrase the meaning of the audio segment or chunks. Students listen to the following:

We might see one or two thunderstorms appearing as the weak goes on, with temperature everywhere at 30 degrees,

The students were asked to give the meaning of the word "thunderstorm"

## Example 2

John will escape the thunderstorm with drizzle and rain only throughout the rest of the night.

Question: What does the word "drizzle "mean?

Her, students try to find clues from the text in order to deduct the meaning of the word drizzle. Through segmenting the input and focusing on comprehending on the meaning of the information pieces, they finally succeeded in recognizing the meaning of the unfamiliar words.

#### Conclusion

The present study investigated the implementation of some chunking to develop EFL listening among a sample of secondary school students, year one. The finding guided the researcher to determine effectiveness of chunking strategy provided for the enhancing of EFL listening skills. Consequently, the significant differences that were found between the performance on the pre test and the performance on the post test in favor of the post test performance can be attributed to the utilization of the chunking strategy program that showed effectiveness. Based on the above results, it can be stated that the secondary school EFL listening skills of the students were improved after implementation of chunking.

## **Recommendations of the study**

- 1. Listening for prediction, for inferences and listening for vocabulary should be given more attention in the EFL classes.
- 2. The EFL teachers should encourage their students to apply and utilize the chunking strategy in their EFL classes.
- 3. Teacher should be provided with the main lists of the listening skills required for secondary school students.
- 4. The present study may draw of the EFL curricula designers to the significance of incorporating chunking strategy in the curricula.
- 5. Teachers should be provided with tools for assessing EFL listening skills.
- 6. Drawing the EFL teachers' attention toward the importance of chunking strategy in developing EFL listening skills.

## Suggestions for further research.

- 1. Some topics for further research are suggested as follows:
- 2. Using chunking to enhance EFL listening skills with primary and preparatory students.
- 3. A program based on chunking for enhance EFL listening skills with university students.
- 4. Utilizing chunking program to enhance students' EFL reading skills.
- 5. A program based on chunking for enhancing students' EFL writing skills.

#### References

- Abdelrahman, O. N. (2014). Effectiveness of using you tube on enhancing EFL students' listening comprehension skills. Thesis of master, College of Language and translation, Al-Imam Muhammad Ibin Saud Islamic University.
- Ali, H. S. (2010). The effectiveness of a self-efficacy based program in developing EFL oral communication skills among prospective teacher.M.A thesis, Faculty of Education, Benha University.
- Bao, X. (2017). A study of listening strategies by teachers and strategies used by students. *International Journal of English Linguistics*, 7(2), 186-195.
- Bellezza, F. S. & Young, D. R. (1989). Chunking of repeated events in memory. *Journal of Experimental Psychology: Learning Memory, and Cognition*, 15(5), 990.
- Brown, D. (2001). *Principles of language learning and teaching*. 4th edition, Pearson Education.
- Brown, H. D. (2007). *Principles of Language Learning and Teaching*. 8th Edition, New York: Addison Wesley Ltd.
- Chekaf, M., Gauvrit, N. Guida, A., & Mathy, F. (2014). Chunking in working memory and its relationship to intelligence. *Psychological Review*, 102(2), 333-338.
- Darmuki et al. (2017). Evaluating information processing-based learning cooperative model on speaking skill course. *Journal of Language Teaching and Research*, 8(1), 44-51.
- Egan, D. & Schwartz, B. (1997). Chunking in recall of symbolic drawing. *Memory and Cognition*, 7(21), 149-158.
- Fernand, G. (2005). Chunking models of expertise implication for educations. *Applied Cognitive Psychology, 19, 183-204.* (www.interscience.wiley.com) Do I: 10: 1002/acp.1110).
- Gad, D. A. (2018). The effectiveness of a program based on Dogme approach in developing governmental language secondary school students' EFL listening and speaking skills. Ph.D. Dissertation, Faculty of Education, Menoufia University.
- Gilakjani, A. & Sabouri, N. (2016). *Learners' listening difficulties in English language learning: A literature review*. Canadian Center of Science and Education, Canada.
- Gilbert, A., Boucher, V. J. & Jemel, B. (2014). Perceptual chunking and its effect on memory in speech processing. https://doi.org/10.3389/fpsyg.2014.00220.
- Gobet, F. (2012). Chunking mechanism and learning. http://www.researchgate.net/publication/308158087.

- Guo, J. (2018). The enlightening of information processing theory on college English teaching. Advances in Economics, Business and Management Research, 75, 158-160.
- Hedge, T. (2000). *Teaching and learning in the language classroom*. Oxford: Oxford University Press.
- Jannejad, M., Shokouhi, H. & Haghighi, S. B. (2012). The effects of controlled language processing on listening comprehension recall. *English Language Teaching*, 5(9), 155-165.
- Mahamed, C. (2015). Chunking information for international Design. Online. Retrieved on January, 12th 2015. At http://theelearningcoach.com/clearning design/chunking-information/2015.
- Malamed, C. (2012, July 24). Chunking Information for Speaking Fluency. Retrieved July 22, 2020, from http://theelearningcoach.com/elearning\_design/chunking-information/
- Mansy, M. F. (2018). Enhancing EFL comprehension skills via a blended learning program for prep stage students. *Journal of the Faculty of Education*, 116(1), 1-25.
- Mohamed, F. S., Zaza, M. S., Youssef, A. E. & Abdallah, D. T. (2019). The effect of using chunking on developing EFL literacy skills among preparatory school pupils. *Journal of Faculty of Education, Benha University*, 120(2), 1-29.
- Mohammadi, M. & Enayat, B. (2020). The effects of lexical chunks teaching on EFL intermediate learners' speaking skills. *Instrumental Journal of Instruction*, 7(22), 102-123.
- Nemtchinova, E. (2020). Teaching listening. English language teacher development. *TESOL international associations*.
- Nilamadhaba, M., Namrata, S. Swapna, S. (2021). Ensemble model for chunking. *Journal of Language Literature and Translation Studies*, 5(2), 286-293.
- Norris, D. & Kalm, K. (2015). What's in a chunk and data compression in verbal short-term memory? University of Cambridge, UK. Dennis.norris@mrc-cbu-cam.ac.uk.
- Pike, P. & Carter, R. (2010). Employing Cognitive chunking techniques to enhance sight-reading performance of undergraduate students. *International Journal of Music Education*, 28(3) 231-246.
- Robert, F. & Lane, P. C. (2012). Chunking mechanism and learning. In N.M. Seel9ed); (2020), *Encyclopedia of the Science of Learning. New York, NY: Spring.*

- Sapitri, R. (2018). *The use of motivational movie to improve students' listening comprehension*. Thesis of Master, Faculty of Education and teacher training, Ar-Raniry State Islamic University.
- Sargent, J. Dopkins, Philbeck, J. & Chichka, D. (2020). *Chunking in special memory*. The George Washington University, Washington, DC 20052.
- Syomwene, A. (2013). The teaching of oral communication skills in the English curriculum primary school in Kenya. *European Scientific Journal*, 9(28), 167-177.
- Thornton, M. A. & Conway, A. R. (2013). Working memory for social information chunking or domain-specific buffer ? *Neuro/image*, 70, 233-239.
- Tyagi, B. (2013). Listening: an important skill and its various aspects. *An International Journal in English*, 12, 1-8. Retrieved March17, 2020, from www. the–criterion.com.
- Utami, L.N. (2019). *EFL students' linguistic problems in chunking*. M.A thesis, University of Negeri Malang.
- Utomo, S., Kusmaryati, S. E. & Sulistyowati, T. (2019). The challenging and difficulties in teaching listening: Exploratory research in a junior high school in Kudus. *Journal of Language & literature*, 14(1), 27-38.
- Willis, Q. (2006). A course in English Language teaching (2nd ed). Shanghai: Higher Education press.
- Youssef, E. R. (2019). The effects of using music lyrics multimedia-based program on developing some listening comprehension and speaking skills for primary school pupils. M.A. thesis, faculty of Education, Menoufia University.
- Yu, Z., Chen, W., Kong, Y., Sun, X. 1. & Zheng, J. (2014). The impact of clickers' instruction on cognitive loads and listening and speaking skills in college English. *PLOS ONE*, *9*(9), 2-21.
- Yun-Kul, C. (2010). *The importance of teaching listening in the EFL classroom*. New York: National Textbook Compance.
- Yusof, F. M. & Halim, H. (2014). Understanding teacher communication skills. *Procedia-Social and Behavioral Science*, 155, 471-476. www. sciencedirect.com.
- Zafarghandi, A. M. (2014). The impact of teaching chunks on speaking fluency of Iranian EFL learners. *English Language Teaching*, 7(4), 38-45.