Integrating SRS Tools into Listening Triangle Strategy for Enhancing Faculty of Education English Majors' EFL critical Listening Skills

By

Dr. Eman Aly El-ssayed Diyyab

Lecturer of TEFL, Department of Curricula and Instructions, Faculty of Education, University of Sadat City.

ملخص الدراسة

هدف البحث الحالي إلى معرفة ما اذا كان الدمج بين أدوات نظام استجابة الطلاب و إستراتيجية مثلث الاستماع فعالا في تعزيز مهارات الاستماع الناقد في اللغة الإنجليزية كلغة أجنبية لدى طلاب كلية التربية. شارك في البحث مجموعتان من الطلاب والطالبات: مجموعة ضابطة (٣٠ طالب و طالبة) وأخرى تجريبية (٣٠ طالب وطالبة) من الفرقة الثانية (قسم اللغة الإنجليزية) بكلية التربية, جامعة مدينة السادات. تضمن البحث الحالي اختبار مهارات الاستماع الناقد في اللغة الإنجليزية كلغة أجنبية من إعداد الباحثة لقياس مهارات الاستماع الناقد لدى عينة البحث. تم تطبيق الاختبار قبليا على مجموعتي البحث للتأكد من تكافئهما. ثم تم تطبيق المعالجة على طلاب المجموعة التجريبية بينما خضع طلاب المجموعة التجريبية بينما خضع مهارات الاستماع الناقد تطبيقا بعديا على مجموعتي البحث. أثبتت نتائج البحث أن الدمج بين أدوات نظام استجابة الطلاب و استراتيجية مثلث الاستماع كان فعالا وساعد على تعزيز وتنمية مهارات الاستماع الناقد بين طلاب اللغة الإنجليزية كلغة أجنبية بكلية تعزيز وتنمية مهارات الاستماع الناقد بين طلاب اللغة الإنجليزية كلغة أجنبية بكلية الزبية.

الكلمات المفتاحية:

أدوات نظام إستجابة الطلاب, إستراتيجية مثلث الإستماع, مهارات الإستماع الناقد

Abstract

The aim of the current research was to investigate whether the integration of SRS (Student Response System) tools into listening triangle strategy was effective in developing faculty of education majors' EFL critical listening skills. The participants of the research were divided into two groups: experimental and control (30 students each). Participants of the experimental group were taught using the integration of SRS tools into listening triangle strategy, while the participants of the control group received regular instruction in regular EFL listening classes. The instrument of the research was an EFL critical listening test, prepared by the researcher to measure the progress and development of the students in EFL critical listening skills. Having administering the EFL critical listening test to the research participants, the current research findings revealed that the integration of SRS tools into listening triangle strategy was effective in developing EFL critical listening skills among faculty of education English majors.

Key words: SRS tools, Listening triangle strategy, Critical listening skills

Introduction

Students should learn how to be cognizant of the vital role of the listening skills for effective communication in various everyday life situations. Without listening, there is no oral communication or spoken aspect of language. If students fail to comprehend what is said orally they will definitely feel anxious and stressed in EFL classes. Consequently, this will have a debilitating effect that may lead students to lose motivation in learning the language. In many second or foreign language teaching situations, mastering listening skills is considered a lifelong struggle and a serious problem for many EFL and/or ESL learners.

Critical listening, as illustrated by Ozbay (2005) is considered an essential and effective type of listening where the accuracy of the speaker's message of the speaker is efficiently checked. In this type of listening, cognitive processes such "perception" as "comprehension" are generally operated. Every day, EFL students come across with hundreds of audiovisual persuasive speeches in English related to each aspect of life and students are highly expected to show good level of Critical listening skills. They are basically supposed to comprehend, compare, analyze what they hear and make decisions based on their analysis. They should be able systematically determine whether what they hear is true based on real facts or not. Besides, they are supposed to analytically understand needs, assumptions, decisions, opinions, values, and ideas of speakers. Above all, they should be totally meticulous not to form any kind of answers nor opinions before the speakers finish speaking along with being always open minded and active in seeking intentional illustration and understanding in the combination of ideas and inputs. Hence, critical Listening is very important in acquiring understandable input because learning and change do not occur if there will be no input (Yalcin, 2012; Hamouda, 2013; Hiner, 2016; Erkek & Batur, 2020).

Students will be engaged in critical listening when they learn to think critically because critical thinking will help students take some careful steps to better evaluate the messages they receive. Critical thinking is the way that leads to critical listening as it involves processes of analyzing the speaker's ideas, purposes and motives to assess the speech for authenticity and truth. Critical listening skills are essential for academic and professional achievement in EFL classes as they are considered a cornerstone for the success of students. They are crucial for learning and teaching English as second or a foreign language. By listening to others, students meet many of their cognitive, psychomotor, affective and social requirements. At the same time, according to Canpolat and others (2015, p. 165) a great deal of both formal and informal learning is achieved by listening. However, in EFL language classes reading, writing and speaking always receive direct instructional performances but instructors expect that learners will improve their listening skills (passive skills) automatically by their own without any help, practice or guidance (Abdullah, 2013, p. 96).

Critical listening skills should be acquired to improve foreign language proficiency and empower students to see themselves as critical thinkers. However, teaching English at Egyptian faculties of education focuses on teaching reading and writing skills with listening been often neglected and poorly taught. Thus, for non-native students, acquiring EFL critical listening skills becomes a struggle that leads them to hear (perceive sounds by their ears) without listening consciously with concentration to learn (Abdullah, 2013). In addition, Listening courses and materials are often limited and this is the reason that EFL instructors need to find effective techniques and strategies that may help in the development of EFL critical listening skills. Therefore, applying effective listening strategies in critical listening classes has become a necessity.

As part of their learning experiences throughout the processes of education, each student develops listening strategies that may be cognitive, psychomotor-based, or affective in nature Canpolat and others (2015). While implementing cognitive listening strategies, it is rare for FL students to ask their instructors for help when they face

problematic issues. They hesitate to ask questions and this hinders their progress in EFL listening skills. They are not motivated to listen actively to spoken English instead, they act as passive learners who may feel that their listening problems are insurmountable and impossible to solve. As mentioned by Kazu and Demiralp (2017) critical listening becomes impossible when students are totally passive in listening classes. Hence, it becomes critical for FL instructors to help students tackle such serious problems through being active participants. Many university instructors are interested in teaching with active learning strategies along with incorporating educational technology tools so that listening activities in language classes can attain enjoyable, authentic and critical features. Active learning is an educational approach that involves numerous methods and strategies. The focus of active learning is on how students learn not just what students learn. In active learning students work hard to understand, build knowledge and respond to opportunities offered by instructors. Active learning strategies enhance technology-based instruction that vastly facilitate the educational process. Technologybased learning tools along with active learning strategies can positively affect students' academic achievement regarding behavior, interaction and engagement in learning settings (Sharma & Barret, 2007; Strayer et al, 2019; Chacon-Diaz, Lucia, 2020).

For a long time now, there has been great enthusiasm in integrating educational technology in language classes not only to support the efforts of FL instructors but also to help students be independent and active learners. Educational technology relies on the use of recent technological applications or hand-held devices to promote flexibility, mobility and availability of learning. This by the way reflects the digital convergence of electronic learning in response to a more dynamic society that seeks a personalized, lifelong and universal education (Dudeney & Hockly, 2012; Hockly, 2013). Many researchers have proved that one of the most interesting developments in language learning field is the application of educational technology tools as they bring out positive outcomes and significant results in EFL classes. Recent studies have illustrated that integrating educational technology tools in FL classes can (1) shift focus on

student- oriented learning, (2) put emphasis on autonomous and self-learning, (3) create engaging and interactive learning environments, (4) reduce FL anxiety (5) and enhance motivation and positive attitudes towards FL learning (Drexler, 2010; Treller, 2011; Diyyab, 2013; Kessler & Hubbard, 2017; Diyyab, 2018). The current research outlines the integration of some student response system (SRS) tools and an active learning strategy (listening triangle strategy) to help FL students learn independently through creating a classroom environment where students can feel more comfortable to actively cooperate and participate in a group setting.

Student response system (SRS) consists of various educational technology tools that represent an alternative pedagogy which can be applied in EFL classes to promote students' critical thinking skills, motivation, interaction and active participation. SRS tools can be implemented by EFL instructors to facilitate interaction with students and content via hand-held devices, applications and/or programs. These technology-based tools are known under many names as: (CRS) classroom response system, (ARS) audience response system, audience-paced feedback (CPS) (APF) systems, performance systems, (ERS) electronic response system, clickers, polling systems and zappers (Marlow et al., 2009; Johnson & Lillis, 2010; Hunsu & Bayly, 2016) and will be used in the present research as (SRS) tools.

1.2. Context of the problem

In spite of the importance of EFL critical listening skills for EFL students at all educational levels, many students suffer from listening weaknesses and are unable to understand or analyze the messages conveyed in any listening contexts. Many barriers are established between listeners and speakers, as EFL students encounter much difficulty when being engaged in authentic listening situations. These barriers were developed in EFL classes as listening in the field of foreign language teaching and learning as illustrated by Alghanem (2017, p. 26) was not taken into consideration in sufficient ways by either linguists or educationalists compared with other language skills (e.g. speaking, reading and writing). As a result of the extreme negligence of developing all types of EFL listening skills by

introducing appropriate strategies and practices, many problems and hindrances were rooted and they gradually obstruct EFL students' participation in listening environments. Examples of these hindrances are: (1) psychological hindrances, (2) physical obstructions, (3) attitude obstructions, (4) gender boundaries, (5) mistaking suppositions, (6) social hindrances, (7) absence of proper listening training and practice and (8) insufficient listening laboratories and required tools (Al Ghamdi, 2012; Taher & Yaghadn, 2018).

Based on the foregoing problems and obstacles, the researcher has reviewed some related studies that dealt with listening skills in the Egyptian context; it was revealed that EFL students at the Egyptian primary, preparatory, secondary and university levels face serious problems in their EFL critical listening skills. These problems have been traced back, as indicated in the Egyptian related studies, to the complex nature of the listening skills. It was emphasized in the majority of these studies that EFL students can listen to an English native speaker for many hours without understanding a single word unless they understand something about the input. This complexity of EFL critical listening skills is highly related to the role of consciousness in language learning as consciousness level can attract learners' attention to build notes in sufficient degrees and hold them in their memories. Accordingly, without proper training, EFL critical listening skills will not be developed (Amin, 2012; Salem, 2014; Hassan, 2015; Sagr, 2016; Abdel-Kareem, 2017; Gad, 2018; El-Gendy, 2020).

To document the research problem, a pilot study was conducted by the researcher on thirty second-year students enrolled in the English section at Faculty of Education, University of Sadat City, Egypt. The pilot study was conducted during the first semester of the academic year 2019/2020. The results indicated that students obtained very low scores on an EFL critical listening test that consisted of three critical listening main questions. The students could not distinguish between literal and implied meanings. They failed to evaluate the speaker's ideas, purpose and supporting details. Besides, they were unable to differentiate between facts and opinions.

1.3 Statement of the Problem

The problem of the present research was the low level of faculty of education students in EFL critical listening skills. Thus, the current research attempted to investigate the impact of integrating SRS tools into listening triangle strategy on developing EFL critical listening skills for faculty of education students. This can be illustrated in the following questions:

- 1. What are the required critical listening skills for the second year faculty of education (English Section) students?
- 2. What is the level of the second year faculty of education (English Section) students in critical listening skills?
- 3. What are the steps of integrating the SRS tools and listening triangle strategy?
- 4. What is the impact of integrating SRS tools into listening triangle strategy on developing EFL critical listening skills for second year faculty of education (English Section) students?

1.4 Research Objectives

Based on the previous questions, the research was to investigate the impact of integrating SRS tools into listening triangle strategy on developing EFL critical listening skills for Faculty of education, English section, students. The specific objectives were highlighted as follows: (i) to determine the impact of integrating SRS tools into listening triangle strategy on developing some EFL critical listening skills for Faculty of education, English section, students. (ii) to investigate the relationship between SRS tools and developing the level of critical listening skills. (iii) to examine the relationship between listening triangle strategy and critical listening skills.

1.5 Research Hypothesis

This research aimed at testing the following main hypothesis:

• There is a statistically significant difference ($\alpha \leq 0.01$) level between the mean scores of the research participants of the experimental and control groups on the post administration of the EFL critical listening test in favour of the experimental group.

1.6 Significance of the research

The current research was, hence, an attempt to overcome the shortcomings in teaching EFL critical listening skills, which are considered basic skills for achieving oral communication competencies. Besides, it emphasized the importance of providing EFL faculty of education students with activities and opportunities to increase their awareness of critical listening skills and help them to listen, comprehend and judge.

1.7 Definition of terms Critical listening skills

Critical listening skills are operationally defined in this research as the ability of second year, faculty of education (English section) students to actively choose and use an appropriate active learning strategy to systematically analyze and assess the speaker's message of the listening materials in collaborative learning contexts.

Listening triangle strategy

Listening triangle strategy is operationally defined as an active learning strategy that helps in developing faculty of education, English section students' EFL critical listening skills through following certain steps. In this strategy the instructor divides the students into groups of three students each. Each student has a specific role. The first student (the speaker) explains the idea or the concept through a technology-based tool. The second student (the listener) listens carefully to the speaker and then poses questions for further clarifications and details. The third student (the monitor) monitors the progress of the conversation, prepares the feedback and presents it using a technology-based tool. After completing the assigned activity, the instructor switches roles.

SRS Tools

SRS tools are operationally defined in the current research as technology-based learning tools that are presented to EFL faculty of education students in order to reduce FL anxiety and foster motivation, active classroom interaction, as well as positive participation through providing both instructors and learners with

immediate feedback using technological handheld devices, applications or programs.

1.8 Delimitations of the research

The findings of this research were delimited to the following:

- 1. Sixty second year faculty of education (English Section) students at University of Sadat City participated in the research.
- 2. Some EFL critical listening skills required for second year faculty of education (English Section) students.
- 3. The first semester of the academic year 2019/2020.

2. Review of Literature

This part is related to the research variables, critical listening, listening triangle strategy and SRS.

2.1 Critical listening skills

Listening is the first and the foremost communication skill. A skill of great importance for people of different ages as it enables them to learn progressively, understand others, build relationships, create conflicts and openness, resolve communication. Linguistically, listening is the first skill humans acquire. However, listening is the least researched skill of language skills. Most researches have included only theoretical knowledge related to the listening skill. Yet, even if learners do acquire some theoretical knowledge, this does not assure that learners can apply them effectively to improve their listening skills (Erkek & Batur, 2019, p. 239). Further, listening is a process of receiving information through the sense of hearing and creating insightful meaning and comprehension from Accordingly, the message. comprehension prepares learners for analyzing what he or she hears, synthesizing them with his or her current knowledge and evaluating them. Thus, listening is considered a behavior since it is under the impact of some personal traits, such as education and culture (Lu, 2005; Jalongo, 2008).

2.1.1 Types of listening

There are several basic types of listening that differ according to listeners' goals and abilities among them are: (1) discriminative listening: listener only distinguishes sounds without understanding (2) comprehensive listening: listener understands the message that is being communicated (3) empathic listening: listener attempts to understand the feelings and emotions of the speaker (4) participative listening: listener reacts to what he/she is listening to, (5) unattended listening: listener listens quietly without verbal response, (6) creative listening: listener understands what is said and creates new ideas about the speech, (7) selective listening: listener selects specific parts from the speech to respond to according to his/her needs and interests, and (8) critical listening: listener evaluates the speech (Derrington, Groom, & Chapman, 2004; Leonard, 2010; Ahmed, Yacoob & Yacoob, 2015; Karagoz et al., 2017).

Critical listening is an essential type of listening that reflects leaners' abilities to analyze and evaluate the message they receive by making mental judgements. As indicated by Gonulal (2020, p. 311), critical listening is not only hearing but making effort to receive and comprehend what is said. It was added that listening practices can lead to better level of comprehension. Empirically, researches focused on listening skills pertaining to the transition of learners from teacher-led learning to student-directed one. Many day-to-day decisions, values, beliefs and opinions are extremely related to some form of "critical analysis".

According to Melanlioglu (2011) and Daniel (2014) Critical listening is a process of concentrating and understanding what is said to effectively evaluate messages in order to make coherent judgments, and form an opinion on whether the speech is valid or not. When learners are engaged in critical listening they become also engaged in critical thinking. Consequently, listeners need to make use of critical thinking abilities to reach logical decisions. They should be able to assess the strengths and weaknesses of the content, agree or disagree with the information, and analyze and synthesize messages. Thus, it can be imbedded that critical listeners should not claim that the

speech or the materials to which they listen is always faulty or flawed. Rather, they should ask coherent questions such as "what is the speaker trying to say?" Consequently, as the way that leads to critical listening, critical thinking abilities are clarified in learners' capabilities to ask and/or answer insightful questions productively through using certain processes as, interpretation, analysis, evaluation, synthesis, inference and self-regulation. By successfully applying these processes learners will acquire good levels of decisions making, problem-solving, speaking and critical listening skills (Hilsdon, 2010; Abdullah, 2014; Adege, 2016).

2.1.2 Critical listening processes

Critical listening comprises two main processes: (1) physical (hearing) and (2) cognitive (attention, perception, comprehension, analysis, assessment). Some researchers indicated that some students often attribute their lack of EFL critical listening skills to two main reasons namely: (1) inadequate competence, as students' listening skills are often poor, ineffective and do not always meet the actual need. (2) difficulty of stimulus materials. While, other researchers have tried to be more accurate by categorizing the two major factors that greatly affect learners' listening ability negatively in a broader sense as, internal and external factors, Internal factors include problems such as, foreign language anxiety, low motivation and lack of related knowledge. While external factors may include failure to understand the incoming speech due to speakers' characteristics or environmental noises, diversity of speakers' accents in addition to the length of the speech. Hence, instructors of English as a foreign language face certain prevailing challenges while trying to help students develop their critical listening skills such as, understanding the listening process, choosing the medium to teach listening and handling affective factors as anxiety and motivation. (Hedge, 2005; Luchini, 2009; Bozorgian & Pillary, 2013; Kassem, 2015; Kazu & Demiralp, 2017).

Recently, much interest has been expressed in examining various techniques and methods that can contribute to the development of different types of EFL listening skills. For instance, Possessing strong linguistic proficiency, has proved to be a strong factor in developing EFL listening skills as it can help FL students overcome listening obstacles, be skilled listeners and compensate for limited proficiency. In the past few years, research on EFL listening skills have been increased due to the evolution of continued globalization and the growing interest in developing all aspects of communication, especially oral communication. Among these researches is the research of Yang et al., (2013) who examined the effectiveness of integrating critical thinking CT into individualized English listening speaking instruction using Moodle, a virtual learning environment. Individualized instruction was designed with three key namely proficiency level grouping, individualized instructional strategies and materials, and individualized feedback. Participants of the research were 83 students enrolled in a semesterlong general education course at a large university in Taiwan. The results of the study showed that the participants of the research significantly improved in terms of English listening and speaking, as well as on all CTS subscales.

In addition, Kazu and Demiralp (2017) have conducted a research to determine the level of critical listening proficiency of the teacher candidates. The research sample consisted of 672 teacher candidates studying as senior students in their own. The research instrument was a critical listening proficiency scale, prepared by the researchers. The findings indicated that the teacher candidates generally have a high level of critical listening proficiency. Moreover, the teacher candidates with the verbal score type displayed higher levels of critical listening proficiency. Besides, Kawinkoonlasate (2019) examined the significance of applying the flipped classroom technology approach for instructors and language skill development (reading, writing, listening, and speaking) for learners. Research findings revealed that the flipped classroom technology approach has positively affected the development of learners' four main skills,

participation, motivation, critical thinking, communication skills, and interest in studying foreign languages.

Supriyadi, Mayuni and Lustyantie (2019) investigated the effect of learning models and cognitive style toward students' English listening skill. The participant of the research consisted of 32 students who were divided into two groups, the experimental group and the control group. The data were obtained through listening tests and cognitive style tests. The results showed that the students who were taught with integrative learning models were better than those taught with experiential learning models. There was an influence of interaction between learning models and cognitive styles on listening skills. Unveren (2019) studied a new approach to listening teaching; a discourse oriented approach was introduced. The research was designed as one-group pre-test post-test experimental research to determine the effect of discourse analysis on a sample of 17 students in 5th grade. The instruments were an identification form. achievement tests, evaluation forms and a questionnaire. The research result found that listening skills of the students were improved in the process through discourse analysis method by comprehending the material listened/watched thoroughly.

Moreover, Gonulal (2020) investigated the potential of podcasting and vodcasting technology in developing extensive listening and improving overall L2 listening skills. The research participants were Forty-nine college-level EFL students. The research materials and instruments were listening log assignments, listening progress tests, proficiency tests and a listening log questionnaire. Results revealed that students spent approximately one hour per week on extensive listening with podcasts or vodcasts outside the classroom. Further, Vodcasts were found to be less commonly preferred than podcasts by students. Besides, as measured by listening progress tests and proficiency tests, students were able to make significant progress in their overall listening skills by the end of the year.

Koroglu (2020) explored whether digital short stories can improve language learners' listening skills. The research instruments were a pretest, a post-test and a written structured interview to collect data and it included both quantitative and qualitative components. The interview consisted of six open-ended questions. Participants were preparatory class students of English language teaching department of the university. The results showed that digital short stories provide satisfactory content, supports vocabulary learning, improves language learners' listening skills, helps participants to gain familiarity with complex grammar structures and makes students more familiar with different cultures. Furthermore, participants were satisfied with digital short stories and they thought these digital stories are useful to improve their listening skills.

In this regard, based on literature review critical listening skills were found to be of great importance for EFL learners who are exposed to various cultures and different ways of thinking. Critical thinking skills also are found to be the basis for acquiring critical listening skills in FL classes. Hereafter, Critical listening is a vital part of foreign language acquisition as it is the link that relates classroom language and real life language. Researchers have also emphasized that FL instructors should apply different methods and approaches that help in creating an appropriate psychological and physical classroom atmosphere along with providing further facilities for developing the educational process. Further, it was highly recommended that FL instructors should encourage students to work in pairs and groups to promote active participation and all types of classroom interaction. Based on the forgoing, it can be concluded that large regular classes are not suitable for teaching critical listening skills. Instead, instructors must apply the best strategies and employ the appropriate technology to get rid of the problems of high dense classroom, lack of classroom aids and facilities and the limited study time. These problems may reduce the motivation and cooperation of students and increase their language anxiety. Examples of these strategies and tools are the listening triangle strategy and SRS tools.

2.2 Listening Triangle strategy

Recent educational requirements related to the permanent and rapid change in all fields around the world have raised the need for learning-oriented, student-centred, mastery-based, personalized, collaborative, attractive, highly motivating, positive and enjoyable education (Reigeluth, 2012). Constructivist approaches and active learning strategies support student-centered learning in which students learn by actively getting involved in the educational process. They learn by doing. Thereby, students can learn how to learn. They actively participate in cooperative activities that boost their knowledge, language performance and proficiency. Furthermore, active learning strategies and activities associate students' learning content to real-life contexts to learn how to analyze, solve problems, examine given situations from various perspectives, think critically and be responsible towards learning (Gijbels et al., 2006; Gebre et al., 2014; Walker & Baepler, 2014).

2.2.1 Active learning as an instructional approach

Since the "pedagogies of engagement" concept was first introduced, there were countless efforts by researchers to lay the foundations of this concept, which in turn led to the emergence of many pedagogical strategies and methods that focus on learnercentered learning such as, collaborative learning, cooperative learning and problem based learning. Not surprisingly, that all these methods and strategies have led to the emergence of a distinguished pedagogical approach that is called active learning (Prince & Felder, 2007, pp. 14-16). Conceptually, active learning roots are in constructivist learning theories. In an interpretation to constructivism, Bredo (2000, p. 131) illustrated that knowledge is made not found as learning is viewed as a process of constructing knowledge in basis of relation to previous knowledge. Active learning is a pedagogical approach that consists of a cluster of learning strategies that aim at teaching specific functions, enhancing learners' progressive success in classrooms, focusing on learners' active participation in various learning communities and positively affecting tangible learning outputs and intangible outcomes. Moreover Lumpkin, Achen and Dodd (2015, p. 123) described active learning as any activity that encourages learners to participate in different learning environments, besides engaging them with materials that can enhance their critical thinking skills. Hence, Active learning does positively influence learners' abilities to retain and understand new materials (Settles, 2012; Hyun, Ediger & Lee, 2017). Active learning has also been

called effective learning, interactive education, education without memorizing, and learning by experience (Aytan, 2017, p. 41).

Active learning includes various pedagogical resources that may be utilized and applied by instructors in different classes as, workshops, seminars, webinars, several database repositories and venues where instructors can help their peers and students. All these resources help learners to do and think about what they are doing. Consequently, learners' higher thinking skills as, analyzing and evaluating shall be developed. Moreover, active learning encourages learners to interact in groups or pairs with numerous opportunities to practice everyday life situations and problem solving processes, according to their own paces, to appreciate teamwork and cooperation (Armbruster et al., 2009; Aydin & Koch, 2012; Aytan, 2017). Thus, it can be concluded that active learning key ideas are, changing students' roles from passive to active through cooperation, pair work and group discussion.

2.2.2 Features of active learning classroom

An active learning classroom (ALC) has some features and characteristics that distinguish it from regular instruction classroom and other learning environments. As indicated by Kane (2004, p. 276) ALC has five common features: (1) boosting higher order thinking skills as critical thinking skills, (2) motivating students' responsibility for learning on their own, (3) instructors' organization of learning (4) participation in open-ended learning tasks and activities. activities, and (5) changing students' roles from passive receivers to active participants through interaction, as ALC has widely changed the source of knowledge and information from the instructor to the learner. It facilitates social interaction that plays an important role in enhancing academic achievement. As a result to the above mentioned features, ALC has emphasized the idea of flipping classes from teacher-centered to students-oriented, from individualizing to pairing and grouping because social context was found to be highly related to concepts such as completion and persistence (Johnson & Johnson, 2008; Walker & Baepler, 2017). Another important feature of ALC is the incorporation of technological tools within the educational environment as highly recommended by constructivists. The need for technology inclusion in EFL classes has stemmed from constructivism to help learners better participate in courses, be highly motivated to learn and easily communicate with their instructors and peers. Thereby, they can achieve better concentration and learning achievement (Gebre et al., 2014; Park & Choi, 2014).

As part of their learning experiences throughout the use of active learning strategies, each student develops some abilities that may enhance the acquisition of different listening skills. These strategies might be cognitive, psychomotor-based, or affective in nature. While implementing cognitive strategies in EFL listening classes, learners compare and classify information in their minds, make inferences, formulize what they have learned, generate associations, reason, take notes, and make generalizations (Akyol, 2006). During these processes listeners should be engaged in active learning environments to achieve positive communication as passive listeners are not good communicators. At the same time, active listeners can avoid premature judgment, reflect understanding, clarify information, ask questions, summarize and share their thoughts (Weger et al., 2014; Topornycky & Golparian, 2016).

2.2.3 Active learning strategies

As an instructional approach, active learning includes numerous instructional strategies such as role play, group discussion, simulations, debates, last question, mind map, KWLH, facts or opinions, listening groups, think pair share, information bag, the tour, write three and go, stand up raise your hand share, the four corners, the hot chair, triangles, brain storming, 1-2-4, RAFTS, inside and outside the circle and listening triangle strategy (Agbatogun, 2014; Hung, 2015). Listening triangle strategy is considered an important active learning strategy that focuses on putting students in realistic problems and authentic situations where they are required to seize opportunities given by instructors to find solutions through research, discussion, and exploration. This strategy is one of the recent developments emanating from the ideas of constructivism, which indicates the importance for the learner to build his or her knowledge and experience on his or her own by being an active and a positive

learner. The most important aspect on which constructivism focuses is knowledge construction via sharing, comparing and debating among learners and mentors in a highly interactive environment. Hence, as an active learning strategy, based on constructivism, listening triangle strategy allows FL instructors to create a collaborative classroom environment and encourage students to speak, listen, write, and analyze. In such learning situations, instructors should also help students link what they learn inside the classes with their daily lives and real practices (Alshimry, 2011). Through this strategy; students are allowed to write their solutions to a given task and send them later to the instructor for formative assessment.

Different researches, about applying active learning strategies in EFL or ESL classes to develop EFL listening skills, were carried out. Firstly, some researchers investigated the relationship between active learning strategies and some listening variables such as anxiety, selfefficacy, proficiency, comprehension and apprehension. (Azmi et.al, 2014; Rahimirad & Shams, 2014; Jafari & Hashim, 2015; Zarrabi, 2016; Noguerroles, 2017; Bozorgian & Alamdari, 2018; Izzettin, 2018; Sadatmir et.al., 2018; Fathi & Hamidizadeh, 2019; Cao & Lin, 2020). Besides, Agbatogun (2014) tested the impact of active learning approach on developing Learners' Second Language Communicative Competence. Ninety nine pupils from three primary schools participated in the research. The research instruments were some English language listening tests and English language speaking tests to measure pupils' communicative competence. The results indicated that active learning strategies were effective in developing students' speaking and listening skills. Freeman et al. (2014) tested the differences between active learning and regular instruction. The results indicated that active learning was superior to regular instruction methods.

In the same context, some researchers attempted investigating listening triangle strategy as an active learning strategy to improve language skills and learning outcomes in various fields. Examples of them are: Hani and Albassis (2016) explored the effectiveness of using listening triangle strategy in the developing some listening

comprehension skills for the fifth grade primary pupils in Homs. The general sample consists of (60) pupils. The researcher has prepared a listening comprehension test as the research instrument. The research findings revealed that the listening triangle strategy was effective in developing some listening comprehension skills for fifth graders. In addition, Anbuge and Tahaa (2018) investigated the impact of listening in the triangle strategy on the achievement of second year intermediate classes / female students in history. The research participants were sixty students. The researcher has prepared an achievement test as the research tool. The research findings emphasized the importance of applying the listening triangle strategy in developing achievement of second year intermediate students.

Al-Qadi (2018) examined the effect of using listening triangle strategy on developing 6th graders Arabic critical listening and creative reading skills in middle Hebron. The study was applied on a purposeful sample of 6th grade students in a governmental school in Directorate Hebron. The sample included (132) students at Al-Rayan Secondary Girls School and the Prince Mohammed Boys School located in middle Hebron. The study instruments were a critical listening test and a creative reading test. The study findings revealed the necessity of implementing this strategy in teaching Arabic reading skills for better outcomes, and more studies should be conducted on different variables and subjects.

As previously mentioned in the related literature, some core points may be concluded such as the consensus of literature studies on the effectiveness of active learning with its various strategies in developing learning outcomes in general, which include language learning skills within them. However, there is a dearth of studies that dealt with the application of the listening triangle strategy in EFL classes to develop EFL skills despite the strong consensus by researchers that active learning has deeply improved the pedagogical identity, students' personal views about learning and instructors perspectives on their profession. In addition, few drawbacks have hindered the implementation of ALC such as, incompetent and unqualified instructors, lack of necessary funds, equipment and materials and overcrowded classes. Thus, for the sake of devising radical solutions to overcome such obstacles, the integration of

modern technological techniques such as, SRS tools within ALC in order to reach the maximum educational benefit was applied.

2.2.4 Steps of the listening triangle strategy

There are two main steps that should be applied when using listening triangle strategy in EFL critical listening classes. The first step is that instructors divide students into cooperative groups of three members each (speaker, listener, and monitor). During this step, as indicated by Johnson and Johnson (2008, 29), it is essential for FL instructors to make proper and suitable decisions (e.g., how to assign groups, assign roles within each group, provide topics and materials, clarify clear goals for each group and give instructions). Then, instructors should give clear instructions about the certain roles of each group member to ensure systematic cooperation and avoid confusion and chaos. According to listening triangle strategy, it is the speaker's role to start discussing the idea or the topic of the given audio material after finishing listening. Then, the group listener's role is to listen carefully to speaker and ask for more details and illustrations about the idea of the topic. The third role is for the monitor of the group who is required to monitor the discussion between (the speaker and the listener) and provide immediate feedback. Moreover, he or she has to write notes about the discussion between the listener and the speaker and when his /her turn comes he/she should record his/her notes, show them to other group members and finally send them to the instructor. The second step comes after finishing each group activity as the instructor should switch roles of the group members (Anbuge & Tahaa, 2018, p. 124).

2.3 Student Response System (SRS)

SRS tools are a variety of educational technology-based tools (apps, programs or clickers) that can be applied by instructors to help students show their responses and solutions for given tasks illustrating their immediate feedback. Fortunately, in recent years, because of the enormous technological developments most SRS tools became available in electronic stores and even free to use. Some of these tools are, Kahoot (Kahoot, 2017), poll Everywhere (poll Everywhere, 2015), socrative (socrative, 2017), flip quiz, padlet,

Microsoft PowerPoint, and plotagon. Figure 1 shows some popular apps or clickers:



Figure 1: a collection of some SRS tools adapted from Shaban 2017 p.66

The integration of one or some of these tools within the educational process helps in the development of language learning outcomes. These tools were found, to enhance students' in class discussion and active participation. Further, as indicated by Shaban (2017, 65) Online SRS tools highly facilitate and enhance student-teacher interaction and help instructors to engage students in active learning roles. To sum up, benefits of SRS tools as illuminated by Bergtrom (2006, p. 106) were:

- Enhancing classroom participation, student retention and learning to both student and instructor.
- Applying tasks and activities based on critical thinking.
- Giving immediate feedback and applying better formative assessment techniques. As responding to students' performances is controversial in FL/SL instruction for greater student retention, stronger academic self-esteem, positive feeling and achieving best learning outcomes (Diab, 2005; Elshawa, Abdullah & Rashid, 2017; Zakaria & Hashim, 2020).
- Increasing all types of interaction as teacher-student, student-student and student-content interactions by offering equal opportunities to all students to participate.
- Enhancing students' attention and awareness in class.

• Motivating students to attend EFL/ESL classes.

As demonstrated by Johnson and Lillis (2010, p. 140), SRS is a simple three step process that starts firstly with the instructor or the student displays or verbalizes a question or problem (topic), spontaneously generated or previously prepared using an SRS tool such as PowerPoint (audio-video). Secondly, all students send their answers via handheld tools using SRS apps such as Kahoot. Hereafter, instructors should prompt peer and group discussion after sending answers. Then students resend their answers again. Thirdly, answers are received, aggregated and displayed on both instructors screen and an overhead projector accompanied by instructors' feedback and comments. Thus, in this implementation of SRS tools in EFL critical listening classes, instructors can achieve three types of positive feedback (self-correction- peer correction and instructor's Therefore, it becomes highly recommended feedback). educationalists and psychologists to produce technology-based activities that promote immediate positive feedback.

Many researchers have started investigating SRS tools and applying them in language classes to examine their effectiveness. Some studies showed that the incorporation of SRS tools in classrooms has proved to be fruitful. For example, McDonough and Foote (2015) tested the impact of individual and shared clicker use on students' collaborative learning. The results illustrated that shared clicker activities resulted in a more collaborative learning and stimulated students' collaborative reasoning. In addition, Amin, Qoura and Alsheikh (2017) investigated using student response system to enhance listening and speaking skills for EFL Saudi secondary school students. Participants of the study were sixty students. Instruments of the study were a pre-post listening and speaking skills test to determine the level of the student listening and speaking skills. Results showed that SRS tools were effective in improving EFL students' listening and speaking skills. Moreover, Kulikovskikh, Prokhorov and Suchkova (2017) examined the impact of the incorporation of SRS in the teaching process. The results

found out that incorporating SRS in teaching promoted peer collaboration.

In addition to the above mentioned studies, Jour et al., (2018) examined effectiveness of the student response system (SRS) in English grammar learning in flipped English as a foreign language (EFL) class. The study instrument was a questionnaire that was applied to the study participants. The results showed that the use of the SRS tools has increased students' learning motivation and selfefficacy in learning English grammar and has improved their active participation and engagement in the in-class activities of the flipped learning process. Besides, the questionnaire results showed that students accepted the SRS tools as an instructional method in an EFL flipped class. However, the use of the SRS tools was not effective in improving students' grammar learning achievement. Moreover, Yunus et al., (2019) examined the use of Kahoot for teaching writing in English as a Second Language (ESL) classroom to create engagement and active learning. The research participants were forty undergraduate TESL students. The research instrument was a questionnaire that was designed by using online form via Google form. The findings showed that the use of Kahoot can create engagement and active learning among students for teaching writing in the ESL classroom.

The specific SRS tools that were addressed in the current research were Microsoft PowerPoint (audio-video), kahoot and plotagon. Using kahoot helps the instructor use different question types. The Quiz is the basic type of question. It requires the question and at least 2 options, one of which must be marked as the right answer. Premium adds the possibility to choose between "single select" or "multi select". Single select means that the player can choose only one option and Multi select means that the user can select any number of the four options presented. A true or false variant is also available with the main difference being that the only two options (true or false) are fixed and cannot be changed. These two types do not require any account upgrades. The next question type is Open-ended, meaning the students must type in the correct answer to get points. The creator must select the accepted answer; however he can also set

multiple accepted answers. The last type of question is Puzzle, which requires the student to align the four options in order, which the creator sets as correct (Papia, 2019). Various studies illustrated that using Kahoot in language classes has many benefits. It has been found to increase learners engagement, interaction, motivation and language acquisition (Licorish, George, Owen & Daniel, 2017; Bicen & Kocakoyun, 2018; Yuruk, 2020).

The second tool is plotagon, an intuitive content creation software (https://plotagon.com/) that can be used in language classrooms due to its movie creation interface, as a storytelling tool for creating short or longer filmed records. Plotagon has been an educational app that allows students to create instant animated videos. Students can create their own characters, choose scenes, write and record dialogs, and add emotions, sound effects, and actions. Through using plotagon students can create movies and graphic out puts from written or recorded inputs (Love, 2013; Guzmán Gámez & Moreno Cuellar, 2019). The third tool is PowerPoint. As explained by Radanov (2008) and Benghalem (2015) "PowerPoint is a type of presentation software that helps learners or instructors show colored texts and images with simple animation and sound". This tool can be shown on a computer screen or using a projector with a large screen for the whole class who can view the same presentation at the same determined time. It can be used also in hand-held devices such as tablets, mobile phones and ipads.

To effectively enhance positive interaction and engagement in language classes through the use of SRS tools Johnson and Lillis (2010) suggested the following: (1) At the beginning, during or at the end of the session, the instructor displays pre-prepared PowerPoint slide question(s) related to the session's main topics. (2) Students respond through the SRS technology-based tools. (3) The instructor prompts group interaction or peer discussion after the display of the students' responses with no clue to the correct answer. (4) Students respond for the second time through the SRS tools. (5) Correct answers are indicated, followed by the instructor's clarifications, comments and contributions.

3. Methodology

This section of the research dealt with a presentation of its methodology steps and components. It includes research design, participants, instrument, materials, variables and procedures.

3.1 Research design

This research utilized the experimental design. In this design the researcher used two groups, experimental and control with 30 participants in each group. The participants of the research were drawn randomly. Both groups were pre-tested to measure their homogeneity level before conducting the experiment. Administering the pre-test was very essential for this research. Participants need a certain level of linguistic proficiency in order to be able to be critical listeners. They need adequate linguistic competence in their listening comprehension level to make sense of listening materials. The EFL critical listening test was administered to the research participants before applying the integration of the SRS tools and the listening triangle strategy. Each multiple choice listening question had three response choices from which participants had 30 seconds to choose the correct answer and mark it in the answer sheet provided after listening to the recorded material. The content of the recorded material was read by American male/female native speakers. Testing took 30 minutes. The test was held in classrooms that helped participants avoid outer distractions such as noise and crowd. The critical listening test was used as a pre-post- test. During the experiment, the experimental group participants were divided into ten groups of three members each (speaker, listener and monitor). Participants of each group changed roles after each activity. They were exposed to the integration of SRS tools: Kahoot, plotagon and PowerPoint and the listening triangle strategy, whereas the control group participants were exposed regular instruction classes. Having administering the experiment, the two groups were post-tested to investigate any significant differences in their EFL critical listening skills.

3.2 Research participants

The participants of the research consisted of 60 second year Faculty of Education, University of Sadat City students (English Section) within the age range of 19-20 years in the academic year 2019/2020. The participants were drawn randomly and were assigned to a control and an experimental group with 30 students each.

Research material and instrument

In order to conduct this research, the researcher prepared and used the following material and instrument:

- An EFL critical listening checklist.
- An EFL critical listening test with a rating scale.

3.3 Data collection and Procedures

The research participants were pre-tested using the EFL critical listening test. Prior to implementing the EFL critical listening test, it was subjected to reliability and validity testing. Establishing the reliability and validity of the test was of great importance for the research process. To validate the EFL critical listening test it was submitted to two experienced TEFL lecturers and Two TEFL professors at faculties of education. Besides, the test re-test method was used to determine the reliability of the test.

3.5 The EFL critical listening test (Appendix B)

The EFL critical listening test was used as a pre-post-test. It consisted of two parts that were developed to measure some EFL critical listening skills (making predictions and formulating questions, evaluating the speaker's ideas and the quality of supporting evidence, comprehending and solving the problem in the message, recognizing cause/effect relationship, distinguishing between literal and implied meanings, identifying the speaker's attitudes and/or emotions, responding to the text by formulating opinions and judgments, recognizing the speaker's purpose, recognizing the speaker's motives, analyzing a message, reacting emotionally to the given message, relating new and previously learned information, distinguishing

between the main idea and the supporting details, summarizing main ideas, determining the difference between facts and opinions, spotting weaknesses in reasoning, recognizing biases and deducing comparisons, similarities and differences).

Part one was divided into two sections. Firstly, students were asked to listen carefully to an audio record of an American native speaker before receiving the answer sheet. After completing listening to the audio record, students were asked to start answering questions of section one that dealt with ten multiple choice questions. Students were asked to carefully listen to each question and they were given thirty seconds after finishing the question to choose the correct answer. It was clearly indicated before starting the test that neither the audio nor the questions shall be repeated for any reason. Section two of the test was developed to measure some skills such as (recognizing biases-reacting emotionally to the speaker's message and formulating personal opinions). Students were requested to answer in brief forms sometimes using one or two words only.

Part two of the test consisted also of two sections. At the beginning of part two students listened to the second audio record by an English native speaker before getting their answer sheet. After they have completed listening to the second audio record they were asked to start answering questions of section one. Section one of the second part of the test involved some multiple choice questions that were devoted to measure some EFL critical listening skills such as (making predictions and Relating new and previously learned information). Students were given 30 minutes by the end of each multiple choice question to choose the correct answer. Moreover, question of the second section of part two were developed to measure some EFL critical listening skills as (Comprehending and solving the problem in the message and Summarizing main ideas). Students were given two minutes to answer each question of second sections' questions of the test. The students' answers were then corrected and analyzed.

Table (1): Specification of the EFL Critical Listening Test

Part	Section	Questions	Measured skill				
One	Section	1	Recognizing the speaker's purpose				
	one	2	Distinguishing between the main idea and the supporting details Recognizing the speaker's motives				
	•	3					
		4	Identifying the speaker's attitudes and/or emotions				
	•	5	Analyzing a message				
	•	6	Evaluating the speaker's ideas and the quality of supporting evidence				
	•	7	Determining the difference between facts and opinions Recognizing cause/effect relationship				
	•	8					
•		9	Distinguishing between literal and implied meanings				
	Section	10	Spotting weaknesses in reasoning				
	two	11	Recognizing biases				
	•	12	Deducing comparisons, similarities and differences				
	•	13	Responding to the text by formulating opinions and judgments				
	•	14	Reacting emotionally to the given message				
Two	Section one	15	Making predictions and formulating questions				
	•	16	Relating new and previously learned information				
	Section two	17	Comprehending and solving the problem in the message				
	•	18	Summarizing main ideas				

3.5.1 Validity of the test internal consistency:

This type of validity of internal consistency seeks to determine the value of the correlation between the scores of each of the test items separately and the test as a whole, using the Spearman Brown equation to calculate the correlation coefficient, and the results are shown in the following table:

Table (2): the values of the correlational validity coefficients for the test items

Item	Test correlation coefficient	Item	Test correlation coefficient	Item	Test correlation coefficient
1	0.48**	7	0.67**	13	0.63**
2	0.43*	8	0.72**	14	0.61**
3	0.72**	9	0.57**	15	0.33*
4	0.52**	10	0.31*	16	0.56**
5	0.49**	11	0.55**	17	0.63**
6	0.41*	12	0.77**	18	0.61**

As illustrated in the previous table, all the test items are related to the test as a whole, either at the level of (0.05) or (0.01), which indicates that the test has a high degree of validity of internal consistency which means that all the test items were in the same context to achieve the main aim of the test.

3.5.2 Reliability of the test

The test re-test method was used to determine the reliability of the EFL critical listening test. The test was applied to a sample of 30 second year students enrolled in the English section, Faculty of Education, University of Sadat City and was re-applied by an interval of fifteen days to the same group. To calculate the value of the reliability factor for the test, the calculation of the value of the coefficient of Cronbach's Alpha was calculated through using the Statistical Package for Social Sciences (SPSS) program, version 22. And the results were shown in the following table:

Table (3): The Reliability of the EFL Critical Listening Test

No. of test items	Sample	Pearson inter-rater value	Sig.
18	30	0.83	High

Accordingly, the value of the Cronbach's Alpha coefficient is 0.83 which indicates that the test was highly reliable.

3.5.3 Ease and discrimination coefficients of the test

The calculation of the ease and difficulty coefficient is necessary in explaining the ease or difficulty of each item included in the test, and the difficulty factor is the percentage of students who answered correct answers to the number of total answers on the item, and by using statistical equations to calculate the ease and difficulty coefficients for each of the test items, it becomes clear that the values of ease and difficulty coefficients ranged between (0.25 and 0.68), which indicates that they are appropriate rates of ease and difficulty. Therefore the values of the ease and difficulty coefficients were acceptable. Besides, the values of the discrimination coefficient ranged between (0.20 and 0.23). Therefore it was found out that the current test items have a high ability to distinguish between outstanding and weak students. The following table illustrates the results mentioned above:

Table (4): The values of ease and discrimination coefficients for the test items

Item	Ease coefficient	Discriminatio n coefficient	Ite m	Ease coefficient	Discrimination coefficient
1	0.58	0.21	10	0.28	0.23
2	0.37	0.23	11	0.43	0.20
3	0.36	0.22	12	0.68	0.22
4	0.51	0.21	13	0.61	0.21
5	0.29	0.20	14	0.52	0.22
6	0.25	0.21	15	0.33	0.21
7	0.44	0.22	16	0.66	0.20
8	0.5	0.20	17	0.47	0.22
9	0.54	0.20	18	0.39	0.21

3.5.4 Homogeneity of research groups in the pre-administration of the test

The research instrument was applied prior to the experiment to the research participants in order to ensure their homogeneity and to adjust the experimental variable. This was to avoid the influence of some variables such as, time and age, on the research results after the implementation of the experiment. Thus, it was taken into account that the application hours for the two research groups were equal and the ages of the participants ranged between 19 and 20 years. With regard to the pre-administration of the EFL critical listening test on the two groups, the test was pre-administered to the two research groups on 11/11/2019, and t-test was used to identify the significance of the difference between the mean scores of the two groups. The results were illustrated in table (5) as follows:

Table (5): The t-value and level of significance in the preadministration of the EFL critical listening test.

Group	No	Mea n	S. D	D. F	F. Value	Sig.	t-value	Level of sig.
Control	30	16.73	6.36					
Experi mental	30	16.87	7.19	58	59	Not sig.	0.076	Not. Sig. at 0.05 level

From the previous table, it can be clarified that the two groups were independent and homogeneous. The homogeneity of the two groups was illustrated using the value and significance of the coefficient (F) in the previous table, and the absence of a statistically significant difference at the level of (0.05) between the mean scores of the research participants, the experimental and control research groups, in the pre-administration of the EFL critical listening test. Therefore, there was a high possibility of applying the research experiment to the participants of the experimental group.

3.5.6 Scoring the test

The EFL critical listening test contained two groups of MCQ and two groups of (open-ended, yes-no or wh questions). The questions of the test were relatively presented according to the degree of difficulty, so

they ranged from easy to more difficult, starting with multiple choices and moving to open-ended questions. Number and types of questions were illustrated in the following table:

Table (6): Number and types of questions of the test

Part	Number of questions	Types of questions
One	14	9 MCQ
		5 Open-ended, yes-no or wh questions.
Two	4	2 MCQ
		2 essay question (solving problems writing a summary)

3.6 Rating scale for correcting the EFL critical listening test (appendix C)

The test was corrected using a rating scale prepared by the researcher to ensure the scoring objectivity. It was conducted to assess the research participants' EFL critical listening skills (spotting weaknesses in reasoning, recognizing biases, relating new and previously learned information, summarizing main ideas, responding to the text by formulating opinions and judgments and reacting emotionally to the given message). The rating scale included items distributed through the EFL critical listening checklist. Each previously mentioned EFL critical listening skill was scored on five-point Likert scale basis of a scoring scale from "5" to "1". "5" represented the highest critical listening level, while "1" represented the lowest level.

3.7 Procedures of the research

The participants of the research were pre-tested using the EFL critical listening test in order to ensure the homogeneity of the research groups before the implementation of the experiment. Then, the participants of the experimental group received listening instruction based on the integration of the SRS tools into the listening triangle strategy beside their regular listening instruction classes.

While, the participants of the control group received regular instruction in regular listening classes. The participants of the experimental group were taught using SRS tools and the listening triangle strategy in 19 sessions. Each session lasts for 90 minutes. The first session was an orientation session where the participants were introduced to the SRS tools and the listening triangle strategy. The rest of the sessions were devoted to developing some EFL critical listening skills for faculty of education, second year, (English Section), students.

Formative assessment began in the third session to ensure that the researcher and the participants were familiar with each other and with the purpose of the research. Participants of the experimental group were asked to work in small groups of three members each. At the beginning of each session the students were introduced to the topic and objectives of the session through the use of brainstorming strategy and PowerPoint presentations just to motivate students' background knowledge. Moreover, the audio topics were simple and they reflected daily life conversations and speeches. This use of simple daily conversations and speeches was because students' levels were not yet efficient to get involved in more complex issues. The audio recorded materials were recorded by some native male and female speakers. The length of the recorded audios ranged from 2 to 12 minutes maximum.

Participants of the experimental group were introduced at each session to: i) learning objectives of the session; ii) introduction and presentation of the listening topics; iii) listening triangle strategy steps; iv) technology-based SRS tools; v) critical listening activities and vi) home assignment. Eighteen different audio records were used. These audio records were related to every day or daily life topics such as; having pets, giving advice, describing a summer day and describing job qualifications. The recorded audio topics were obtained from YouTube (www.youtube.com) and or (https://www.britishcouncil.org.eg/) and were recorded by American or English native male and female speakers.

In each session, participants of the experimental group practiced listening triangle strategy through a repertoire of different activities in English. All sessions revolved around combining SRS tools with listening triangle steps to help learners critically recall what they heard in the target language. During the orientation session (session one), the use of the listening triangle strategy steps along with some SRS tools were clearly illustrated to the research participants in different modeled activities. Tutorial videos about SRS tools were introduced to the research participants. In addition the participants were divided into ten three-member groups to allow student-student interaction and knowledge share. It was highly emphasized that listening triangle strategy relies deeply on consistently switching roles after each activity. During the sessions, the instructor acted as a leader, a topic provider, a monitor and a facilitator. After the end of the experiment the participants of both the experimental and control groups were post tested to find out the impact of integrating SRS tools into listening triangle strategy on developing some EFL listening skills. After testing the research participants, the results were analyzed and discussed.

4. Findings and discussion

In order to answer the previous research questions and in light of the quantitative results of the post administration of the EFL critical listening test on the participants of the experimental and control research groups, this section deals with the findings in terms of the research hypothesis.

4.1 Findings of the research hypothesis:

The research hypothesis states that "there is a statistically significant difference ($\alpha \leq 0.01$) level between the mean scores of the research participants of the experimental and control groups on the post administration of the EFL critical listening test in favour of the experimental group. By applying t-test to compare the mean scores of the participants of two independent and homogeneous groups (experimental and control) in the post administration of the EFL critical listening test and determining the statistical significance of the

difference between them, the results were as shown in the following table (7):

Table (7): t- test differences between the participants' mean scores in the post administration of the EFL critical listening test.

Group	No	Mean	S. D	D. F	Sig	t-value	Level of sig.
Control	30	17.00	4.76		sig.		
Experimental	30	33.93	5.97	58		12.16	0.01

In light of the results of the previous table, it is clear that the calculated t-value of is 12.16, exceeding its tabular value of 2.02 at a degree of freedom 58 at a level of statistical significance (0.01), these results indicate that there is a real difference between the mean scores of the research participants in the experimental and control groups, in the post administration of the EFL critical listening test in favor of the experimental group. This finding of the research can be clarified using the following statistical representation:

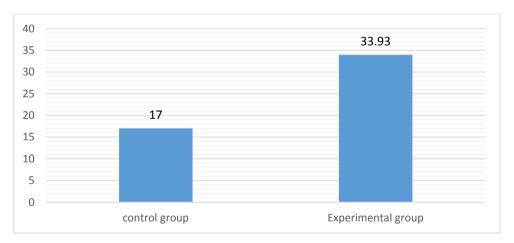


Figure (2): The statistical representation of the research participants' mean scores on the post-administration of the EFL critical listening test.

Accordingly, it was confirmed that there was a statistically significant difference at the $(\alpha \le 0.01)$ level between the mean scores of the research participants of the experimental group that was taught using the integration of SRS tools into listening triangle strategy and

the control group that received regular listening instruction in the post-administration of the EFL critical listening test in favour of the experimental group. In order to calculate the effect size of integrating SRS tools into listening triangle strategy to develop some EFL critical listening skills for Faculty of education, second year (English Section) students. The statistical significance alone was not sufficient to determine the importance of the research. Thus, the practical significance and the educational importance of the research results should be clarified by determining the value of the ETA square and its significance and the value of the effect size and its significance, in order to determine the contribution of the independent variables in the development of the dependent variable while isolating the influence of other extraneous variables from the results of the experiment. The results are illustrated as follows:

Table (8): The effect size of the integration of the SRS tools into listening triangle strategy to develop EFL critical listening skills.

Group	D. F	t-value	Sig.	ŋ2 value		Effect size	
				value	Sig.	value	level
Control							
Experimental	58	12.16	0.01	0.72	Sig.	1.59	Large

Based on the previous results, it becomes clear that the value of the ETA square for the results of the participants of the experimental groups in the EFL critical listening test exceeds the value indicating the educational importance of the statistical results in educational and psychological research, which is estimated at (0.15), this indicates the positive effect of the integration of SRS tools in listening triangle strategy on developing EFL critical listening skills. Further, The effect size also reached (1.59), which is a large (high) level of influence, as the size of the effect is considered large if its value is greater than or equal to (0.8), which also indicates the practical and educational significance of the results of the research and the high impact of the independent variables on the development of the dependent variable.

Based on the previously illustrated results, the research hypothesis was verified. Besides, in order to determine the effect of teaching using the integration between SRS tools and listening triangle strategy to develop EFL critical listening skills, the equation of the modified gain ratio for Black between the grades of the experimental group participants in the administration of the pre and post- EFL critical listening test was calculated and the results appeared as follows:

Table (9): results of the modified ratio of gain for Blake among participants of the experimental group in the pre and post administration of the EFL critical listening test

Administration	Mean	The maximum End	Ratio of gain	Sig.
Pre	16.87			
Post	33.93	46	1.2	Sig.

As clarified in the previous table, there are statistically significant differences between the scores of the experimental group participants in the pre and post administration of the EFL listening test for the adjusted ratios of gain for Blake shown in the previous table are equal to the reference value, which is 1.2 as determined by Blake. Thus, teaching through integrating SRS tools into listening triangle strategy to develop EFL critical listening skills for faculty of education (English Section) students was greatly effective. The results of the research hypothesis are consistent with results of previous studies, which are concerned with the development of EFL critical listening skills, and among those studies are the studies of (Ferrari-Bridgers, Vegel, & Lynch, 2017; Gulten & Zekerya, 2019; Gonulal, 2020; Gulten & Zekerya, 2020).

This effectiveness may be due to the following reasons:

1. The great importance of critical listening skills for FL learners. That is because nowadays many media organs sometimes publish biased directed or guided news for certain reasons. Thus, EFL learners of different stages should be able to handle

- issues through listening critically (Gulten & Zekerya, 2019, p. 642).
- 2. Applying different listening strategies and techniques by EFL instructors will help EFL leaners develop their critical listening abilities through minimizing anxiety and maximizing practice (Hidayati, 2018, p. 110).
- 3. Critical listening skills proficiency leads to higher English language achievements that produce fluent EFL learners who can easily be involved in global issues and be introduced to other cultures (Lirola, 2018, p. 2).

4.2 Discussion

EFL critical listening skills had been proven to be very influential in learning English as a foreign language. A number of studies pointed out that Critical listening skills are very essential for EFL learners to achieve higher proficiency levels in English (Ferrari-Bridgers, Vegel, & Lynch, 2017; Gulten & Zekerya, 2019; Gonulal, 2020; Gulten & Zekerya, 2020). The purpose of the current research was to determine the impact of integrating SRS tools into listening triangle strategy on developing EFL critical listening skills for faculty of education, (English department) second year students.

The results of this research showed that the integration of SRS tools into listening triangle strategy had a positive impact on the development of EFL critical listening skills for Faculty of education students. This integration allowed participants of the experimental group to develop their abilities to be active learners and listeners who can successfully apply active listening strategies and techniques in listening activities. Participants of the experimental group gradually showed high levels of enthusiasm and self-confidence and this led them directly to acquire critical listening skills. In each session, the participants of the experimental group gradually reflected sufficient levels of progress and development in their critical listening skills. Their abilities to listen carefully and understand appropriately were developed. They started to apply critical listening skills systematically in analyzing and assessing what has been told. However, very few of them could not leave the passive area of learning, as they kept describing each speech as always good or always bad. They did not want to use or apply acceptable critical listening skills, thinking that this would keep them away from being criticized through committing mistakes or believing that avoiding critical listening skills will help them avoid participation that might cause anxiety and misunderstanding according to their own points of view.

Listening triangle strategy steps and procedures highly motivated participants of the experimental group to share and work collaboratively. They were enthusiastic to work with their peers in different roles to complete the listening activities. They helped and encouraged each other to apply the strategy steps. Not surprisingly, the listening triangle strategy motivated EFL students not only to listen critically but also to speak, write and communicate with their peers and instructors in social contexts. Listening triangle strategy has focused on developing students' cognitive, psychomotor and affective domains to ensure sufficient progress in EFL skills. Besides, the core of the listening triangle strategy was to create an active learning environment, full of attractive techniques and teaching aids to motivate students to feel free in expressing and sharing their ideas, discussing and accepting opinions, asking questions and getting and providing immediate positive feedback. This rich active learning environment has influenced students' skills and attitude towards learning English in authentic contexts and using it outside the classroom environment.

It is worth mentioning that the use of some SRS tools within listening triangle strategy in EFL listening classes has proved to be useful for EFL students on the cognitive, psychomotor and affective levels, as learners no longer feel bored in language classes, but rather their enthusiasm and motivation to learn by using modern technological tools has increased. These tools have added a spirit of fun and excitement to the language classes, which prompted students to search for everything new and useful from these tools and use them in more than one way to achieve maximum benefit. Despite the great benefit of applying SRS tools in EFL listening classes, some students of the experimental group have encountered some obstacles when trying to apply them. These problems were related to the use of these tools. For example, some students have encountered issues related to

the quality and speed of the Internet while downloading PowerPoint slides with audio features or Kahoot quizzes. In addition, these programs were not suitable for some students' phones, and they were forced to change their devices.

In the same context, at the beginning of the experiment, the experimental group participants' enthusiasm was very high for group work according to the listening triangle strategy, but they were not able to use the SRS tools well with the same quality as their implementation of the listening triangle strategy steps. However, the progress in the application sessions increased the participants' efficiency in using the tools, and even they became creative in the way of employing, using and benefiting from them. Unexpectedly, the interesting result was that the students of the control group, receiving regular instruction and regular activities, did not make any significant progress in EFL listening skills. Participants of the experimental group on the other hand demonstrated that the listening triangle strategy and SRS tools gave them an opportunity to overcome serious problems that they used to face in EFL listening classes such as FL anxiety and lack of concentration. Working in groups of three with changing roles progressively has, as mentioned by some participants of the experimental group, allowed them to solve their limited vocabulary problems by getting help from their group members and being able to get things repeated through discussion.

All in all, it worth noting that the findings showed that the participants of the experimental group gained much more than did the participants in the control group. This partially, confirms the conclusions of Bozorgian and Pillay (2013), Tingting (2016), Maden & Onal (2020) that emphasized using listening strategies to improve language skills. Besides, Kaya and Cifici (2019) that focused mainly on using appropriate, up-to-date, daily life listening topics and using various qualitative listening activities to enhance listening skills. Further, other studies has emphasized the use of technology based tools in education e.g. SRS tools. For instance, Heaslip, Donovan and Cullen (2014) clarified the effectiveness of applying SRS tool in pedagogical contexts in higher education to raise the quality of learning experience engagement and increase students

participation in classrooms. Moreover, Ault and Horn (2018) stated that involving SRS tools in learning environments increases active engagement, on-task behavior and academic responding through the use of affordable mobile technologies. Turan and Meral (2018) indicated that SRS tools both with and/or without being based in games have vital roles in increasing FL achievement and engagement and reducing FL anxiety.

5. Conclusions

Considering the obtained results, the participants experimental group after receiving instruction based the integration of SRS tools into the listening triangle strategy in EFL listening classes have demonstrated a higher mean score on the posttest of the EFL critical listening test than the participants of the control group. Therefore, it could be claimed that the integration of SRS tools into listening triangle does have a statistically significant influence on the development of EFL critical listening skills for faculty of education students. As a result of the research it was concluded that the integration of SRS tools into the listening triangle strategy in EFL listening classes has positively impacted positively the development of EFL critical listening skills for faculty of education (English section) students. The outcome of the current research provides useful data for the textbook designers, instructors, and EFL researchers.

6. Recommendations

In the light of the findings of the research, various recommendations for the researchers have been presented as:

- 1. Active participation, collaboration, role playing and group work (core points of listening triangle strategy) should be ensured in EFL listening classes.
- 2. Integrating technology based tools in EFL listening classes is of great importance as it helps students get involved in authentic learning situations.

- 3. Integrating technology based tools in EFL listening classes is also crucial for EFL instructors as it helps them get and receive immediate feedback.
- 4. The selection of EFL listening topics should be based on event-based, not complicated and up-to-date issues.
- 5. Listening topics should vary to cover students' fields of interest and they should not be too long not to distract students.
- 6. Students' needs and problems in listening classes should be regularly determined and assessed.

7. Suggestions for further research

Based on the findings of the present research, the following implications for further research are suggested:

- Investigating the effect of applying listening triangle strategy on developing other language skills such as speaking, reading and writing.
- Investigating the effect of the student response system (SRS) tools on developing other language skills such as speaking, reading and writing.
- Clarifying the effect of utilizing other instructional strategies on developing faculty of education majors' critical listening skills.

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