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## **Developing an Instructional Program based on Digital Awareness and Measuring its Effectiveness in Listening Skill in English among Eleventh Grade Students and their Attitudes towards the Program in Jordan**

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### **Abstract:**

This study aims at measuring the effect of an instructional program based on digital awareness on eleventh grade students' achievement in English listening skill and their attitudes towards it. The participants of the study consisted of (60) female students from Sama Al- Awael Schools which affiliated to Qasabat As- Salt Directorate of Education. The participants Who were divided into two groups with thirty students for each; the control group which was taught according to the conventional strategy and the experimental group which was taught according to the instructional program. The researchers followed the quasi-experimental design and prepared pre- post listening test and the questionnaire.

The researchers used descriptive methodology, as well as (MANCOVA) and (ANCOVA) tests. The results of the study revealed significant differences in favor of the experimental group.

**Keywords:** digital awareness, listening skill, students' attitudes, instructional program, eleventh grade students.

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## تطوير برنامج تدريسي قائم على الوعي الرقمي وقياس فعاليته في مهارة الاستماع باللغة الإنجليزية لدى طلاب الصف الحادي عشر واتجاهاتهم نحو البرنامج في الأردن

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### ملخص:

هدفت هذه الدراسة إلى قياس فاعلية برنامج تعليمي قائم على الوعي الرقمي في تحصيل مهارات الاستماع باللغة الإنجليزية لدى طلاب الصف الحادي عشر واتجاهاتهم نحو البرنامج في الأردن. تكونت أفراد الدراسة من (60) طالبة من مدارس سما الاولى التابعة لمديرية التربية بقصبة السلط، وتم تقسيم المشاركات إلى مجموعتين: ثلاثين طالبة في كل مجموعة. المجموعة الضابطة التي تم تدريسها وفق الإستراتيجية التقليدية والمجموعة التجريبية التي تم تدريسها وفق برنامج تعليمي يقوم على الوعي الرقمي. اتبع الباحثان التصميم شبه التجريبي وأعد الباحثان اختبار الاستماع القبلي والبعدي والاستبانة، واستمرت التجربة لمدة شهرين.

للإجابة عن أسئلة الدراسة استخدم الباحثان المنهج الوصفي التحليلي واختبار MANCOVA (وختبار ANCOVA) لاختبار الفروق الإحصائية. اظهرت النتائج فروقا ذات دلالة احصائية لصالح المجموعة التجريبية.

**الكلمات المفتاحية:** الوعي الرقمي، مهارة الاستماع، اتجاهات الطالبات، البرنامج التعليمي، طالبات الصف الحادي عشر.

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## **Introduction and Theoretical Background**

Language is considered as a means of communication and understanding among people. Language enables its users to communicate their feelings, actions, and opinions to others. Therefore, people should master the language in order to excel in conveying messages to each other in a comprehensible and appropriate manner.

The acquisition of language entails a process that enables children to control their own language perfectly (Campbell & Wales, 1970). Learning a second or foreign language is turning into a necessity for everyone, and learning a language as EFL/ESL requires proficiency in four skills (Jafari, 2013). From various perspectives (Shinozuka, 2017), English is considered the most important international language in the world, and numerous accomplishments have been made in the past decades to improve EFL students' English proficiency.

Learning English language encompasses four skills, namely, speaking, listening, reading and writing. As for listening skill, it is considered the most commonly used activity in our lives (Drood and Aydinlou, 2016). Listening is regarded as an effective way of improving other skills (Dash, 2013). According to Banani (2012), the importance of listening is not only confined to developing such a skill but also developing grammar, intonation, and expanding vocabulary knowledge. It should be noted that listening constitutes a challenge for learners.

According to Dunkel (1991), studying the strategies for enhancing listening comprehension is currently regarded as a cornerstone in second language acquisition researches. Hemmati et al (2015) also added that it is widely acknowledged that providing students with a variety of opportunities for listening practice, the students might be able to develop useful listening techniques, which, in turn, enhances their listening skill.

Listening plays a vital role in the success of English language learning. "The ability to listen well and effectively contributes to the success of the learners and teachers" (Tong, 2019, p. 268). According to Nunan (1998), listening is a process of actively deciphering and building meaning from both verbal and nonverbal messages. There are at least two people involved in a listening situation. A person who produces the language and another who receives the language and comprehends the information that is meant. Listening is thus a receptive talent. Listening is a "meaning-focused" (Cameron, 2001, p.40) active process because students do not only listen to language but also integrate what they hear

with their own knowledge and "listen to the meaning behind the words" (Nunan, 2003, p. 24).

According to Hartmann & Shocker (2004), listening comprehension is a highly complex process that involves a variety of language and non-linguistic knowledge. Moreover, listening comprehension is defined as "an active process of constructing meaning and this is done by applying knowledge to the incoming sound" in which "number of different types of knowledge are involved: both linguistic and non – linguistic knowledge" Buck (2001, p.31).

It is widely acknowledged that the Internet presents an immense wealth of teaching resources. It enables its users to easily identify the required information, including audio and pictures as well. One of the most effective tools is Baidu, followed by Google, and so forth. To clarify, such convenient tools contain an enormous amount of information on any topic that attracts our attention. The majority of such tools are free of charge. Therefore, using the Internet for learning is considered an extremely appropriate method (Cai, 2012). Owing to technological improvements, various studies (Allam & Elyas, 2016; Yang & Chen, 2007) shed light on the role of electronic learning in facilitating the process of studying the language as a foreign one.

Digital literacy is not a new strategy for the students to acquire the necessary knowledge and information. The ability to utilize technology to grant us the right to use materials is an important aspect of digital literacy (Baharuddin, 2016). Digital awareness plays a vital role in improving listening skill. According to Ahmadi and Reza (2018), technology is considered an effective tool for students because it facilitates the learning process.

The concept of digital literacy has included different digital literacies such as browsing the Internet, retrieving, filtering and analyzing the target online material, content creation skills, and media literacy skills (Radovanovic et al., 2020). Producing digitally-literate students has generally meant the prioritization of technical skills in using digital tools and systems deemed appropriate to educational settings, and identifying how these can be used within particular units of learning (Admiraal et al. 2016). Yuan et al. (2019) mentioned that English language teaching should include engaging digital literacy skills, and added that ELLs need some encouragement to develop their digital literacies; this refers to the changing of information creation, communication, and interpretation

according to the technological advances.

Pierson (2014) emphasized that using digital technologies in education has enabled the students share their stories, works, presentations, and projects via the Internet. When adult English learners use their own experiences in learning, it results in real literacy skills that excess motivation and performance among them. Galante (2014) discussed that when ELLs integrate English activities in reading, writing, listening, and speaking with modern computer-assisted pedagogies, their self-esteem, motivation and competency in English language become high and considerable.

One of the major advancements in the field of fostering digital awareness for instructional purposes is a framework called **Common Digital Competence Framework** which informs the instructional program in this study. This framework encompasses a set of competencies such: data literacy and information, communication and collaboration, digital content creation, safety and problem solving. Each competence area includes a set of skills which are developed by the learners.

This study aims at measuring the effect of an instructional program based on digital awareness on eleventh grade students' achievement in English listening skill and their attitudes towards it.

### **Statement of the problem**

The phenomenon of weakness in listening skill is widespread in different educational institutions. A lot of teachers complain about English students' weaknesses in EFL listening in English language, and they mentioned numerous obstacles. According to Dunkel (1991), studying the strategies for enhancing listening comprehension is currently regarded as a cornerstone in second language acquisition research.

Recently, most world educational systems have started to integrate technology into the educational process. Technology has produced prominent contribution to education in this information age. It is well known as Edu technology (Harahap, 2020). Digital awareness is also essential in recent studies, which have become familiar with this technology. Students tend to use digital technology to facilitate their learning of four skills of English language. Yanguas (2009) confirmed the positive effects for combined glosses (i.e., text and picture) and its role in vocabulary recognition and listening skill. In order to improve listening skill, students prefer to use videos, blogs, podcasts, audios and other kinds of multimedia.

It should be mentioned that Arab learners who learn English face two problems that are summarized as making some primary mistakes in spelling, syntax, morphology, listening, and pronunciation, as well as their inability to use English effectively, whether in academic topics or in daily life (Mukattash, 1983). Therefore, the current study seeks to overcome the challenges that hinder EFL students in listening skill in English by developing an instructional program based on digital awareness and measuring its effectiveness on listening skill in English among Eleventh Grade students and their attitudes towards the program.

### **Purpose and Questions of the Study**

The purpose of this study refers to develop an instructional program based on digital awareness and measuring its effectiveness in listening skill in English among Eleventh Grade students and their attitudes towards the program.

This study tries to answer the following research questions:

1. What are the characteristics of the instructional program which is developed on digital awareness in this study?
2. Is there any statistically significant difference between the main scores of the experimental and control group in listening achievement attribute to using conventional instruction versus an instructional program based on digital awareness?
3. What are the students' attitudes towards the instructional program which is used in this study?

### **Significance of the Study**

The significance of this study refers to examining the effectiveness of developing an instructional program based on digital awareness as a way of improving 11<sup>th</sup> grade students' listening skill at Sama Al- Awael Schools in As- Salt, Jordan, by employing such an instructional program to improve students' listening comprehension. This study is considered one of the first studies that investigates the impact of developing an instructional program which is based on digital awareness and measuring its effectiveness on listening skill in English among eleventh grade students and their attitudes towards it.

Therefore, the researchers seek to provide a motivating way to improve English language students' listening skill by developing an instructional program based on digital awareness. Moreover, the present study might be beneficial for curriculum designers in addressing developing instructional program based on digital awareness for improving

EFL students' listening skill. Furthermore, educators might benefit from developing such an instructional program as an alternative method for motivating students to listen more and understand better, which, in turn, improves their listening comprehension. Researchers in this field may also benefit from this study.

### **Definition of Terms**

- **Digital awareness:** Digital awareness is concerned with having essential literacy skills in using digital tools, such as tablets, smartphones, iPads, and computers. The essential skills of these devices, together with the Internet, enable students and teachers access to online resources for teaching-learning effectively (Abbas, Hussain, and Rasool 2019).

The researchers defined it as understanding and utilizing technology in an increasingly interconnected world in learning English. As the instructional material is delivered online via different tools such as; computers, smartphones, audios, tablets and so on. This material will not be taught with the live interaction with the instructor. The researchers test its effect on the dependent variable in this study, namely, listening skill.

- **Listening skill:** the active process of deciphering and constructing meaning from both verbal and nonverbal messages in which two or more people are involved in a listening situation. A person who produces the language and another who receives the language and comprehends the information that is meant. Listening is thus a receptive talent (Nunan, 1998).

The researchers define it as the ability of the students to grasp the intended message from the speaker by the use of the developed instructional program, which was developed digitally. In this study, listening achievement was measured by using a listening achievement test.

- **Students' attitudes:** “Attitude is determined by the individual's beliefs about outcomes or attributes of performing the behavior (behavioral beliefs), weighted by evaluations of those outcomes or attributes.” Montano and Kasprzyk (2015, p.231)

The researchers defined it as the way of students' responding towards learning, whether positively or negatively. It also refers to their attitudes, feelings and beliefs towards learning. Students' attitudes in this study are measured by a developed questionnaire, which is built up

on related literature.

- **Instructional program:** Instructional program means instructional content that is provided to a student, regardless of its format, including printed or representational materials, audio-visual materials, and materials in electronic or digital formats (such as materials accessible through the internet). The term does not include academic tests or academic assessments (Alcala, 2020).

The researchers define it as a term used in education to refer to the planned and organized curriculum and teaching strategies used by teachers to achieve specific learning outcomes. It includes all the activities and materials used to guide the teaching and learning process, including lesson plans, textbooks, assessments, and other educational resources.

- **Eleventh grade students:** Eleventh grade students are usually high school students who are in their third year of secondary education, and are usually around 16 to 17 years old. In many educational systems, eleventh grade is considered a critical year, as students are often preparing for college entrance exams and beginning to make decisions about their post-secondary education and career paths.

### **Limitation of the Study**

This study was limited to:

- **Time limitation:** the current study was applied in the first semester of the academic year 2022/2023, during two months.
- **Spatial limitation:** The application of this study is limited to Sama Al-Awael Schools in As- Salt -Jordan.
- **Participants' limitation:** the current study is limited to a sample of eleventh grade students in Sama Al- Awael Schools in As- Salt – Jordan.

### **Related Studies**

This section includes a set of international and local related studies, which are arranged from the recent studies to the oldest ones.

Al-Slaiti (2022) investigated the effect of using oral and digital storytelling strategies in improving critical listening skills. The aim of the study was to investigate the effect of using oral and digital storytelling strategies in improving critical listening skills among female students of the basic ninth grade in Jordan. The participants of the study consisted of (86) female students of the ninth grade. The study was conducted in Irbid-

Jordan. The data were collected via a test. The results of the study showed statistically significant differences between the performance mean of students in all critical listening skills due to the teaching strategy, in favor of the first experimental group students who were taught using the oral storytelling strategy, the digital storytelling strategy, and there were also statistically significant differences between the performance mean of the two experimental groups in critical listening skills for the second experimental group that was taught using the oral storytelling strategy.

Al-Saadi, Al-Tamimi & Al-khalidi (2021) investigated the effectiveness of using YouTube videos in improving the listening comprehension skills of Jordanian EFL learners. The study used a pre-test/post-test experimental design, and the participants were randomly assigned to an experimental group (which received YouTube-based listening activities) or a control group (which received traditional listening activities). The results showed that the experimental group outperformed the control group in post-test listening comprehension scores, indicating the effectiveness of using YouTube in improving listening skills. Although this study did not specifically focus on the use of digital technology more broadly, it highlights the potential of online resources, such as YouTube videos, in improving listening comprehension skills among Jordanian EFL learners.

Gonulal (2020) conducted a study on the impact of using podcasts and Vodcasts for improving listening skill. The study is both qualitative and quantitative in nature. The participants consisted of 49 college level EFL students. The data were obtained from listening progress tests, listening log assignments, a listening log questionnaire, and a proficiency test. The findings revealed that students spent about one hour on extensive listening with vodcasts or podcast outside the classroom. The findings showed that the students were able to improve themselves significantly by the end of the year. Another interesting finding was that the students that using both vodcasts and podcasts were extremely effective in improving their listening comprehension, promoting their pronunciation, and broaden their knowledge of the vocabulary items.

Nunez (2020) carried out a study on the impact of digital awareness on improving listening skills for students. The sample consisted of 28 participants who participated in this study. The participants were required to watch and listen to short videos in order to promote and enhance their listening comprehension. A grounded theory approach was used for

analyzing the data. The findings showed that critical thinking has a significant impact on improving students' listening skills.

Abbasova & Mammadova (2019) investigated the role of digital technology in English language teaching in Azerbaijan. The study used the qualitative methodology and the data were collected via in-depth interviews. The subjects of the study were teachers aged between 23 and 55 who were employed by Khazar University, Azerbaijan. The findings showed that the use of technology has an important impact on student's second language learning. Teachers also demonstrated how the use of technology in teaching and learning supports students' engagement in education.

Al-Smadi & Alhaj (2019) investigated the impact of using digital tools (specifically, podcasts and YouTube videos) on enhancing the listening comprehension skills of Jordanian university students studying English as a foreign language. The study involved 60 participants who were divided into two groups: an experimental group that received instruction using digital tools, and a control group that received traditional instruction. The researchers found that the experimental group showed significant improvement in their listening comprehension skills compared to the control group.

Al-Adwan & Al-Shehri (2018) conducted a study on the effect of using digital storytelling on Jordanian EFL (English as a foreign language) students' listening comprehension. The researchers used a pre-test and post-test design with a control group and an experimental group. The experimental group received instruction through digital storytelling, while the control group received instruction through traditional methods. The results showed that the experimental group outperformed the control group in listening comprehension, indicating that the use of digital storytelling had a positive effect on the students' listening skills. Although this study did not specifically focus on digital awareness, it does provide evidence that the use of digital technology can be effective in improving listening skills in English for Jordanian EFL learners.

## **Method and Procedures**

### **Study Design**

The design of this study is a quasi-experimental design. There is one independent variable which has two levels: the proposed instructional program and the conventional method. The dependent variables are listening

skill and the students' attitudes. This design is statistically represented as follows:

**EG:** O1 O2 X O1 O2

**CG:** O1 O2 --- O1 O2

**EG** stands for the experimental group; **CG**: the control group; **X**: treatment; **O1**: the listening achievement skill; and **O2**: for the attitudinal questionnaire.

### **Participants of the study**

The researchers select sixty eleventh grade students at Sama Al-Awael Schools in As- Salt- Jordan randomly as the participants of the current study. Their native language is Arabic, while their second language is English. Then, the researchers divided the participants of the study into an experimental group (section A) and a control group (section B) with thirty students for each. The experimental group is taught according to the instructional program and the control group is taught according to the conventional method.

### **Instruments of the study**

#### **The listening test**

The researchers conduct the listening test which consists of 20 multiple- choice questions based on two chosen listening audioscripts. The researchers distribute the questions according to Bloom's Taxonomy in categories (remembering, understanding, applying, analyzing and creating). Each question has four choices, one of them is correct. The total score of the listening test is 20. The pre- post tests are distributed to both control and experimental groups to measure their comprehension in listening skill.

#### **The questionnaire**

The researchers developed a questionnaire for surveying the students' attitudes towards using the instructional program that is developed based on digital awareness to improve their listening skill. The questionnaire consisted of 27 items, on the 4-point Likert Scale ranging from "Strongly Agree" (4) to "Strongly Disagree" (1). The respondents of the study answer the items of the questionnaire which is developed in English Language. Each item revolves around the students' perspectives towards the efficiency of the use of the above- mentioned instructional program which is based on digital awareness, in terms of improving their listening skill.

## **Teaching Methods**

### **The instructional program**

In this study, the instructional program is a set of organized EFL educational experiences which are based on digital awareness. The researchers presented it to the eleventh-grade students with the aim of providing the students with specific experiences to develop their achievement in listening skill. The researchers design the instructional program according to the listening lessons in first semester of eleventh grade English curriculum.

### **The objective of the instructional program**

The instructional program which is based on digital awareness aims at improving listening skill among eleventh grade students by using the first semester digitally- developed units.

### **The importance of the instructional program**

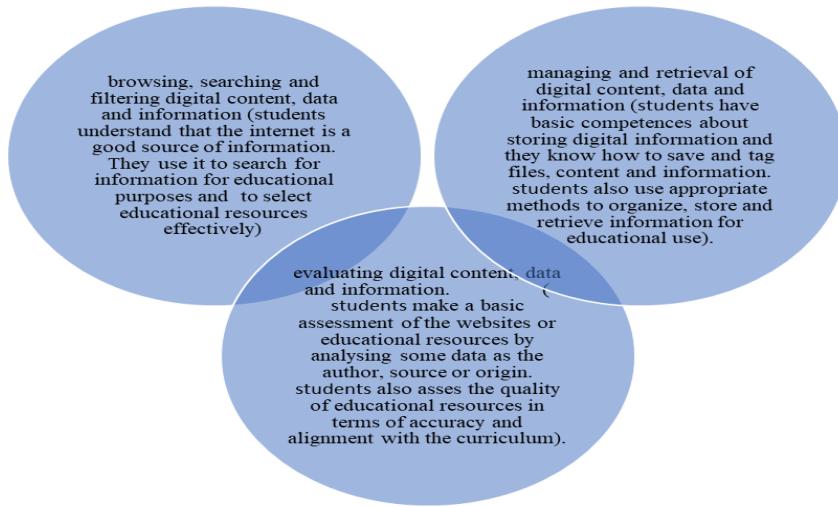
The importance of the instructional program comes from the necessity of using technology among students for achieving academic objectives, as it is a recent trend in educational process. The importance of the program also refers to the noticeable weaknesses in listening skill among students.

### **The content of the instructional program**

The researchers choose the instructional material, which is the set of knowledge and information of the proposed program, with reference to the curriculum itself, teacher book, CDs, educational resources, websites and any external related material. The students and the teacher can easily deal with the instructional program as it suits the students' levels. The instructional material also achieve the program's objectives.

### **The framework of the instructional program**

- Common Digital Competence Framework for students
- Related Information and Data Literacy



The instructional program follows the above framework as a proposed teaching approach to teach listening skill according to The National Institute of Educational Technologies and Teacher Training (2017).

The instructional program initially makes use of the above digital awareness framework by teaching the target units which are based on digital awareness in this study as follows:

- The teacher makes sure that the students browse, search and filter digital content in their listening skill.
- Students search for relevant digital listening content as the target skill in this study.
- The teacher encourages students to select relevant digital information that enables them to develop their listening skill.
- Students are enabled to manage their digital listening content and retrieve it according to their learning needs and situations.
- Students are enabled to store relevant digital content, tag and save it.
- The teacher encourages students to assess the digital listening content and information in terms of accuracy and alignment with their English language curriculum.

### **The conventional program**

The conventional program refers to the teaching method that was included in the Teacher's Book of Action Pack 11. The method followed the communicative approach in teaching, in which students learn within communicative interaction in small groups.

Action Pack 11 focuses on integrating authentic listening material. It

also includes activities that use pictures to let the students predict the meaning of new vocabulary then listen to the CD to get its correct pronunciation. There are also a lot of activities that enable students use dictionaries and glossaries for new vocabulary. The listening audioscripts are recorded by native speakers, so students can memorize its correct pronunciation and understand the listening material by using listening strategies such as note-taking, prediction and paraphrasing.

### **Validation and reliability of the instruments**

#### **Validity of the research Instruments**

To ensure the validity of the instruments and the instructional program; the researchers forwarded the questionnaire, the listening test and the instructional program to a jury of experts in education at academic institutions, universities, principals and supervisors of English Language instruction in order to review them and to obtain their opinions and recommendations. The researchers take their scores into consideration; according to the questionnaire, some items were omitted such as item 14 "The digital instructional program enables students to evaluate the educational context presented to them" because students are not able to do that. Some other items were added such as item 22 "The digital instructional program helps us develop our listening skill" according to its necessity. Whereas for the listening test; the researchers paraphrase some multiple-choice questions, omit and add others in order to suit the aim of the study. Regarding the instructional program; the researchers followed the experts' instructions, their comments, advice, and points of view. And finally, the researchers adopted the adjusted copies of the questionnaire and the listening test according to their comments. After their evaluation, the two instruments were applied.

#### **Reliability of the research instruments**

The test and retest technique is considered one of the methods that is employed to examine the reliability of the instruments. The researchers employed the test and retest also on exploratory sample from outside the study sample, which consisted of (20) female students. The researchers calculate the scores after testing and retesting and before and after forwarding the questionnaire. According to Cohen et al. (2007), a reliability analysis is calculated by using the test/retest approach. The researchers calculated the Pearson correlation coefficient of the test and the questionnaire findings using two methods:

1. By using the Cronbach-alpha equation, it is found that the internal consistency coefficient is (0.762) for the listening test and (0.792) for the questionnaire. These values are suitable for the purposes of the study.
2. The internal consistency coefficients of the test and the questionnaire are calculated according to the Cronbach alpha equation for internal consistency, and the repetition reliability is calculated with a time difference of two weeks.

### **Statistical Analysis**

To analyze the data of the study, the researchers used the Statistical Package for the Social Science (SPSS). This included calculating the means and standard deviations for both groups (i.e., experimental and control). ANCOVA and MANCOVA tests were used to test the statistical differences in the total mean scores between the two groups concerning their responses to the test and the questionnaire.

### **Results and discussion**

The study answered the following questions:

1. What are the characteristics of the instructional program which is developed on digital awareness in this study?

The instructional program which is based on digital awareness aims at improving listening skill among eleventh grade students by using the first semester digitally- developed units.

The instructional material, which is the set of knowledge and information of the proposed program is chosen with reference to the curriculum itself, teacher book, CDs, educational resources, websites and any external related material. It is easy to be dealt with among the students and the teacher; as it suits the students' levels.

The instructional program consisted of a general idea about digital awareness and listening skill, then the proposed temporal plan and the lesson plan for each of the selected listening material which consists of the following: The title of the lesson, the outcomes for the lesson, the estimated time, the material used, the instructional strategy, the assessment tool and the procedures of the lesson which include experiences, activities, the role of the teacher and the students, and teaching methods.

The using of digital tools such as laptops, smartphones, Ipads and others and using of technological applications and websites facilitate and promote learning English. Using these tools for achieving learning objectives enhances learners' motivation and self- esteem while they search,

comprehend, evaluate, analyse, create, tag and share. Learners also improve their knowledge of vocabulary and pronunciation of new words and therefore progress better in listening skill.

**2. Results Related to the Question of the Study:** Is there any statistically significant difference between the mean scores of the experimental and control group in listening achievement attribute to using conventional instruction versus an instructional program based on digital awareness?

To answer this question, the researchers calculate means and standard deviations of students' listening. Results are shown in Table (1).

**Table (1) The means and standard deviations of the pre and post measure of the listening achievement attributed to using conventional instruction versus an instructional program based on digital awareness**

Group	N	Pre-test		Post test	
		Mean	Std. Deviation	Mean	Std. Deviation
Experimental	30	10.23	2.40	13.47	2.87
Control	30	9.83	2.94	10.30	2.98

Table (1) shows that there are differences in the mean scores of students of both groups (experimental and control) group listening achievement attribute to using conventional instruction versus an instructional program based on digital awareness. To test these differences if they are statistically significant or not ( $\alpha=0.05$ ), One-way Analysis of Covariance (ANCOVA) test is applied. Results are presented in Table 2:

**Table (2) One-way ANCOVA analysis for the listening achievement attribute to using conventional instruction versus an instructional program based on digital awareness**

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Pre	133.657	1	133.657	20.923	.000*	.269
Group	128.944	1	128.944	20.186	.000*	.262
Error	364.110	57	6.388			
Total	648.183	59				

\* Statistically significance at ( $\alpha = 0.05$ ).

Table (2) shows that (F) value reaches for total degree (20.186), which is statistically significant ( $\alpha=0.05$ ). This means that there are statistically significant differences in the mean scores of students of both groups for listening achievement attribute to using conventional instruction versus an instructional program which is based on digital awareness between the experimental and control group. The means and the adjusted mean and standard deviations are obtained, and the following table shows these results.

**Table (3) Adjusted mean scores and standard errors for the listening achievement attribute to using conventional instruction versus an instructional program which is based on digital awareness**

		Group	Mean	Std. Error
listening skill	Experimental	13.354	.462	
	Control	10.413	.462	

Table (3) shows that the Adjusted mean of the listening achievement is in favor of the experimental group, which means that the experimental group performance is better than the performance of the control group in the listening achievement.

And to distinguish the effect size, Eta Square is obtained, and table (8) shows that the effect size of total degree reaches (0.262), which means that (0.262%) of the variance in the total degree scores of the measure attribute to the program which is based on digital awareness.

On the other hand, the means and standard deviations of students with regard to the dimensions of the listening achievement attributed are calculated. Results are shown in Table 4:

**Table (4) Means and standard deviations of the listening achievement attributed on different dimensions to using conventional instruction versus an instructional program which is based on digital awareness**

Dimensions	Group	N	Pre-test		Post test	
			Mean	Std. Deviation	Mean	Std. Deviation
Remembering	Experimental	30	4.43	1.43	5.70	1.15
	Control	30	4.80	1.42	4.43	1.30
	Total	60	4.62	1.43	5.07	1.38
Understanding	Experimental	30	2.20	0.81	3.20	0.96
	Control	30	2.17	1.23	2.53	0.94
	Total	60	2.18	1.03	2.87	1.00
Analyzing	Experimental	30	1.67	0.80	1.90	0.88
	Control	30	1.13	1.01	1.20	1.00
	Total	60	1.40	0.94	1.55	1.00
Creating	Experimental	30	1.93	1.11	2.67	1.30
	Control	30	1.73	0.83	2.13	1.20
	Total	60	1.83	0.98	2.40	1.26

Table (4) reveals that there are differences in the mean scores of students of both groups (experimental and control) in the pre and post measurement of the listening achievement attributed to using conventional instruction versus an instructional program which is based on digital awareness, and to test these differences if they are statistically significant or not ( $\alpha=0.05$ ), multivariate analysis of covariance (MANCOVA) test is applied. Table (5) shows these

results:

**Table (5) One-way ANCOVA analysis for the listening achievement attribute on different dimensions to using conventional instruction versus an instructional program which is based on digital awareness.**

Source	Dimensions	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Remembering Pre	Remembering	4.129	1	4.129	3.360	.072	.059
Understanding Pre	Understanding	1.862	1	1.862	2.114	.152	.038
Analyzing Pre	Analyzing	8.453	1	8.453	11.915	.071	.081
Creating Pre	Creating	9.778	1	9.778	8.368	.005	.134
<b>Group</b> Hotelling's Trace = .322 F= 4.111 Sig = 0.006	Remembering	17.130	1	17.130	13.940	.000*	.205
	Understanding	5.357	1	5.357	6.082	.017*	.101
	Analyzing	2.506	1	2.506	3.532	.006*	.061
	Creating	1.542	1	1.542	1.319	.256	.024
Error	Remembering	66.356	54	1.229			
	Understanding	47.561	54	.881			
	Analyzing	38.310	54	.709			
	Creating	63.100	54	1.169			
Total	Remembering	111.733	59				
	Understanding	58.933	59				
	Analyzing	58.850	59				
	Creating	94.400	59				

\* Statistically significance at level ( $\alpha = 0.05$ ).

Table (5) shows that (F) value for the dimension “Remembering” is (13.940), (F) value for the dimension “Understanding” is (6.082), (F) value for the dimension “Analyzing” is (3.532) and (F) value for the dimension “creating” is (1.319).

These values are statistically significant at significance level ( $\alpha = 0.05$ ), this refers to the presence of differences with statistically significance on the listening achievement attributed to using conventional instruction versus an instructional program which is based on digital awareness between the experimental and control group.

**Table (6) Adjusted mean scores and the standard errors for the listening achievement attributed dimensions according to using conventional instruction versus an instructional program which is based on digital awareness between the experimental and control group**

Dimensions	Group	Mean	Std. Error
Remembering	Experimental	5.633	.209

Dimensions	Group	Mean	Std. Error
Understanding	Control	4.5	.209
	Experimental	3.184	.177
	Control	2.55	.177
Analyzing	Experimental	1.767	.159
	Control	1.333	.159
Creating	Experimental	2.57	.203
	Control	2.23	.203

Table (6) shows that the adjusted mean of the listening achievement attributed and the measure's total degree was in favor of the experimental group, which means that the experimental group performance was better than the performance of the control group in the using of conventional instruction.

And to know the effect size, Eta square is obtained, and table (5) shows that the effect size of the organization of the all dimensions " Remembering, Understanding, Analyzing, Creating" reached respectively (0.205, 0.101, 0.061, 0.024) which means that the variance in dimensions scores attributes to the program based on using conventional instruction versus an instructional program , for all dimensions " Remembering, Understanding, Applying, Analyzing, Creating" was respectively (0.205%, 0.101%, 0.061%, 0.024%).

These results refer to the effectiveness of the instructional program which is based on digital awareness on improving listening skill among English language learners. The results of the current question are similar to Al-Slaiti (2022), Al-Saadi, Al-Tamimi & Al-Khalidi (2021), Gonulal (2020), Nunez (2020), Abbasova & Mammadova (2019), Al-Smadi & Alhaj (2019), Al-Adwan & Al-Shehri (2018) Al-Adwan & Al-Shehri (2018) and who investigate the impact of digital awareness on listening skill among ELLs.

3. **Results Related to the Question of the Study:** What are the students' attitudes towards the instructional program which is used in this study?

To answer this question, the researchers calculated means and standard deviations on pre and post measure of the attitudes towards the instructional program which is used in this study.

**Table (7) The means and standard deviations of the pre and post measure of the attitudes towards the instructional program used in this study to the program used.**

Attitudes	Experimental group	N	Mean	Std. Deviation	T	DF	SIG
Attitudes	Pre-Test	30	3.29	.404	-3.015	29	.005*
	Post Test	30	3.49	.372			

\* Statistically significance at ( $\alpha = 0.05$ ).

Table (7) shows that (T) value is (-3.015), which is statistically

significant ( $\alpha=0.05$ ) on the means and standard deviations of the pre and post measure of the attitudes towards the instructional program which is used in this study.

These results show the positive attitudes among the learners toward the digital instructional program. Learners show a remarkable improvement in listening skill and confirm that the target digital instructional program increases their digital awareness knowledge by using different tools, applications and numerous educational websites. They agree that the target program is easy to apply at any time. They also agree on the clarity of the selected reading and listening materials and various activities that allow them to work in groups and pairs are also attached.

Learners agree that the digital instructional program helps them to find appropriate solutions to critical thinking questions in listening skill. It also enables them to paraphrase and summarize the listening materials. The learners confirm that the digital instructional program helps them to increase their vocabulary repertoire.

The learners assert that they could save the listening materials in order to refer to them later on. They also confirm that the digital instructional program develops their experiences in searching through information databases and educational websites and provided activities for searching and browsing in scientific search engines. The program considers their various interests and their different levels of intelligence.

## **Conclusion and Recommendation**

According to the results of the current study the researchers concluded that using the digital instructional program improve listening skill among 11<sup>th</sup> grade English language learners.

The researchers recommended that:

- It is necessary for curriculum developers to include digital awareness programs in English language curriculum.
- It is important to attract English language teachers' attentions towards the effectiveness of developed digital instructional program in improving listening skill among English language learners.
- It is significant to adopt the developed digital instructional program in teaching English language for Eleventh Grade.

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