

ISSN (Print): 2682-3918 - ISSN (online): 2682-3926

Volume2 / Issue3, August 2021 DOI: 10.21608/ihites.2022.113250.1102



# Designing of Podcast Ubiquitous Technology-Based for Developing some English Language Skills and User Collaboration

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#### **Abstract**

The design of podcast in electronic environments to develop English language skills is one of the innovative trends. Hence, the Ubiquitous of the technology-based learning is an endeavor due to the availability of mobile devices and smart phones of various types among students on campus. Yet, the dilemma lies in shortage of activating them to achieve the students' academic factors. It is very difficult either for the lack of skills of the learners themselves or for the absence of teachers' skills in designing and employing these technologies to benefit from them on the university campus. The difficulties are crystalized in the lack of specialists in educational technology, as it requires an understanding of design standards, models and strategies of teaching within these environments. For this goal, integration between researches in such disciplines seems necessary. Regarding the weakness of academic skills among the students themselves, this may be due to students' preoccupation with technological tools that are not related to the development of their academic performance. Consequently, specialists from faculty members in universities should guide students to benefit from e-learning environments professionally and personally from such environments such as ubiquitous learning and podcasting for developing academic skills such as English language skills associated with speaking. The environment should be linked to improving user collaboration to interact with the provided content to achieve the greatest possible benefit from such environments in which the performance of learners must be documented. In effect, the research aims at identifying the mechanisms of Designing of Podcast Ubiquitous Technology-Based, and measuring the impact of this design on the development of some English language skills, which were challenged in the research with the skill of speaking due to its close association with voice podcasting. This has been illustrated in the student achieving the following skills (Good pronunciation, choosing words to express the situation, organizing the content of the dialogue, choosing the appropriate time to speak, choosing the appropriate pauses, and a good conclusion). In addition, it aims at identifying the extent to which the design of Designing of Podcast Ubiquitous Technology-Based. In addition, it provides opportunities for students to achieve high collaboration, which was described in the research with user collaboration. The following set of skills are such as (the student's collaboration in linking the course content, the student's collaboration in the course's learning activities and tasks, and the student's collaboration in helping others in the environment) and these skills represent aspects of the learner's personality in electronic environments.

Keywords: Podcast, Podcast Ubiquitous Technology-Based, English Language Skills, Speaking, Collaboration



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# Introduction

In the past, technological advancements helped in raising the incomes of the majority of people. Nevertheless, it is likely that the required changes - for workers, companies, and all economies sectors- have adverse consequences. Many observers believe that the latest wave of technological innovation will be more confusing than previous waves, especially for students. In this regard, they point to the slight growth of real skills that seems a must for students in their educational life, especially with new technological advances - in the areas of artificial intelligence, automation and robot technology — which may be massive than their predecessors. This may result from the easily replacement of some technologies.

This requires understanding the factors that affect students' performance in education and whether these technologies can be used in the teaching and learning processes. It is a technological tool that has become increasingly popular in recent years. A blog is a website that allows people to instantly share thoughts and feelings with their fellow readers. It provides functionality that allows users to comment on topics that interest them and have been widely used in many fields (Gracie & Rita, 2005). Understanding, appreciating, and evaluating individual differences in behavior, feelings, and thoughts have long been central topics in psychology. A great deal of literature has relied on individual differences in behavior. There is little amount of information known about how individuals actually differ in their objectively quantifiable behaviors and how differences in these behaviors relate to personality traits. Technological advancements in laptop and sensor technology have now made it possible to automatically record large amounts of data about normal human behavior. Collecting and analyzing these records enables researchers to be analyzed and estimated the behavioural differences at an unprecedented and effectiveness scale (Stachl et al., 2019).

Podcast design contributes to students' success as it helps in professional development that focuses on an action plan to participate in university research, study abroad, training, leadership, and community service also as workshops on developing personal skills for users. In addition, podcast in electronic environments would help peer interaction, their efforts to participate which is an effective tool for improving the way forward towards developing user skills in posts (Johnson, Plattner, & Hundley, 2018).

Generally, Al-Hosary (2002) refers to the need to prepare learners with skills and experiences that enable them to deal with the current data and challenges, in addition to employing technological innovations and investing their potentials in the field of education in order to achieve these trends including various programs, since this technology is one of the modern applications of computers and the Internet. It requires recognizing the possibility of using it in educational institutions in order to achieve the directions related to preparing individuals capable of dealing with the variables of this era.

Hence, ubiquitous learning must be provided either through: synchronous, which is the interaction at the same time with the difference in the place between individuals in the ubiquitous learning environment through direct dialogue rooms (whether textual, audio or visual), or the asynchronous interaction

pattern, which is the interaction at any time in the different places between individuals in the ubiquitous learning environment through the student entering the learning environment at any time, such as electronic discussion applications and the synchronous and asynchronous pattern, which is the merging of the two together. Each of the previous patterns of interaction has different characteristics that distinguish it from other patterns. In addition, the efficiency of cognitive representation varies according to the degree of familiarity of the cognitive unit and its repeated use or employment in meaningful formulas or contexts where interaction patterns can be designed (Aly, 2016).

#### The problem of the Study:

Through the second researcher's observation of the students' poor performance in the language skills associated with the phonetics lab and their observation, it is apparent that there are some difficulties that the students face during the application period in the phonetics lab. In addition, the students relied on the theoretical aspects of the course without paying attention to the skills required to achieve the required performance in the phonetics lab skills. In light of literature specialized in the academic aspect, it is clear that dealing with the employed (traditional) methods are considered unattractive tools for students of the twenty-first century, who require that the learning of skills should be transferred by relying on technological tools that suit the tendencies of these students and openness to new teaching horizons that require more effort by providing Educational environments relying on the technologies of the digital age. Via discussion, the role of the first and third researcher emerged in providing modern frameworks that are trending with the design of podcast and digital podcast environments based on ubiquitous technology (phones / tablets) that can help in language education to develop some English language skills and help in student participation (the user ) and develop performance. This is what the literature confirms, such as (Johnson ET AL,, 2018; Cetin et al, 2019) that such environments are active and effective in changing the performance of learners and providing them with the necessary skills. Therefore, the current research aimed to design of podcast based on ubiquitous technology to develop some language skills and user participation in acquiring the language skills of the phonetics lab among students of the faculty of Education. Therefore, the study problem is crystalized in the following main question:

How can Podcast ubiquitous technology-based be designed to develop some language skills and user engagement?

Several sub-questions arise from this question, as follows:

- 1. What is the appropriate instructional design model to design podcast based on ubiquitous technology to develop some language skills and user engagement?
- 2. What skills are needed to develop language skills (phonetics) Students of the faculty of Education?
- 3. What skills are needed to develop (user participation) skills in podcast environment based on ubiquitous technology among students of the Faculty of Education?



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4. What is the efficacy of designing podcast based on ubiquitous technology to develop some language skills among students of the Faculty of Education?

5. What is the efficacy of designing podcast based on ubiquitous technology to achieve user participation in the electronic environment?

#### Objectives of the study:

The study aims to achieve the following objectives: - To identify the effectiveness of the podcast design based on ubiquitous technology on developing some language skills among students of the Faculty of Education, and achieving user participation in the electronic environment.

The importance of the study:

The importance of the study emerges from the need of the students of the Faculty of Education to use an environment commensurate with modern trends with a design of a podcast based on ubiquitous technology to develop some language skills among students of the Faculty of Education and verify this with a set of standards that lead to positive results in the development of English language skills.

#### **Definition of Terms:**

#### Podcast:

It is an environment designed using podcast that represents a record for students on the internet where they can publish, comment, discuss and involve in continuous dialogue using audio clips to achieve English language skills "speaking", and can be accessed to it through a ubiquitous learning environment.

# **E-Learning Ubiquitous:**

It is an educational environment that was designed using podcast for students enrolled in the phonetic lab syllabus practical sessions to achieve content and activities and learning tasks inside scheduled syllabus, and using portable devices any time in any place.

#### **English Language Skills; Speaking:**

It is a package of English language skills that students in the Faculty of Education specialized in linguistics must possess. Students should attain the next skill levels (good pronunciation, choosing the suitable words to express themselves and the appropriate time to speak, organizing content dialogue, and selecting pauses, and good conclusion). It is known as the degree that the student obtains.

#### **Collaboration:**

It is a set of personal skills that should help students in achieving high participation in a study course which was described in the research by the user. Determining the next skills to achieve has been set (students participate in reaching the content, also students take part in learning activities and tasks of the content, and help others in the environment) as these skills represent some aspects of the learner personality in the electronic environments.

#### Literature review

Blog is made up of two words: Web+log, meaning the network record. It is called a blog for short records; including the source of podcast, which is the process of creating and publishing a blog. Bloggers are people who blog. The domain or world of blogsphere, which is the interconnected world of blogs available on the Internet, which can be accessed through search engines or through podcast headlights. (Elfar, 2015, 72).

Blogs are distinguished communication tools with students and can be used effectively in the educational process, whether for the teacher or the student, in order to communicate the requirements and instructions of lessons to students or communicate with the teacher outside the classroom. Blogs are easily created, enabling students to create their own or teacher-created blogs, publish their own topics in courses and allow teachers and classmates to view and comment on them, and add comments by peers. Using blogs in teaching language skills is especially

#### important for podcasts.

Blogs based on ubiquitous environments are considered as new windows for participation. There are reasons that made electronic blogs a new source of information (Issam Mansour, 2009), which are:

- Fertility of ideas and opinions and a plurality of viewpoints.
- Diversity of forms of information between text, audio and image.
- Accumulating and increasing information continuously and quickly.
- Up-to-date information and its ability to add, delete and modify.
- Participation and interaction (whether with the author of the blog or with the owners of the interventions who leave means to contact them, such as their e-mail.
- Flexibility in dealing with information in terms of browsing, reading, saving it digitally, and adapting it to other programs.
- Possibility to quote and cite.
- It has links and links related to its topic, which strengthens the fertility of information.
- Can support group thinking in the design of educational experiences.
- It can support encouraging students to ask questions about the test and results and receive responses about them.
- It can be used as a space for Q&A activities of students, teachers, professionals and blog visitors.
- It can support a space in which students collaborate to work together as evaluators of course-related learning materials.

Ubiquitous learning applications can be used to develop practical performance skills. E-learning technology and its applications such as RSS, and podcast systems are a good environment for the application of ubiquitous learning (Badwy, 2015). That is podcast is an audio broadcast or audio content available on the internet, differing from radio that you can listen to it at any time and not only when broadcasting live. After the popularity of Apple's iPod (Hasan, 2013), RSS for apps is one



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of the notable features of contemporary technology that conveys details about incorporating location awareness into mobile applications giving users a more realistic XML-based experience (Extensible Markup Language). This file is stored on a cloud hosting service until podcast programs pick it up (Khan et al.,2017). Such tools are among podcast tools that can be trusted with E-Learning ubiquitous Applications.

E-Learning Ubiquitous provides ways of interaction for serious learners, as it depends on the technology of spreading everywhere by being accessible in an interactive learning environment, and (Botz, 2012.p34). The technology of audio podcasting achieved many advantages in education, including:

- Content Presentation: Increasing student interaction with the course content.
- Correcting with a teacher: Studies have shown that people respond more with audio and video than with texts to multitask.
- Mobility: The student can watch the lesson while traveling on a train while traveling in the car while performing various exercises.
- Attracts the attention of the new generation of students using voice communication can be accessed at any time and place.
- Increasing the learner's control.

Thus, phonics can be designed in a ubiquitous learning environment, which achieves many features and benefits in acquiring English language skills by students, the phonemic skills of the Phonics lab course, and increasing users' control over the shared content. Study results indicate (Aljawarneh, 2020; Chen et al., 2017; Behjat, Yamini, & Bagheri, 2012) that such technologies help in acquiring students with the required skills that can be relied upon as tools of the innovations of the digital age. Hussein, M. (2018) confirms that measuring the impact of the educational blog on developing language skills is one of the necessities because the technology of the digital age necessitates experimenting with such techniques and benefiting from them in teaching. The researcher recommends using educational blogs to develop electronic reading skills for all school levels, and activating educational blogs in developing Arabic language skills. In addition, Al-Suraihi (2018) study shows that podcast is one of the most important social networking applications in the Web 2 environment. 0, and provides a great deal of seminal digital content, especially in the scientific and educational field. It is necessary to identify the role of blogs and the podcast process in supporting and developing the capabilities of education students, especially in the scientific environment and the role of blogs in general, and the development of interactive information technology applications, and networks, specifically blogs in the educational process. This will contribute to supporting scientific digital content on the Internet and developing a proposed framework for an e-learning blog on communication skills. It is recommended to create a framework for electronic podcast to be an alternative to the "written expression course". In the past, the aim was to bridge the gap created by the successive developments in smart devices, and its relevance to the mental levels of students, and the poor level of students in language skills. For the study of Al Ghusn (2015), it seeks to verify the use of podcasting in students' acquisition of language skills.

According to the second researcher, there is a little bulk of research related to the issues and learning and developing receptive language skills (reading and listening) in the context of language learning everywhere. This requires that environments are developed for students to learn such skills, including reading, scenario-based conversations, and questions and answers that are created in the reading and audio sections. He also emphasized that students demonstrate positive attitudes towards actual performance. Finally, the discussion among the researchers about design and development issues affecting learning factors, problems, and suggestions in a ubiquitous learning environment is processed. A quick survey may reveal that listening and speaking are the most difficult skills among Arabic native speakers. Technology can help in promoting such skills, but most students are poor users. The skills can be present effectively through:

- joining Chat podcasts and Web 2.0 tools help you join classrooms and connect with native speakers of English which helps to improve and grow the language more effectively.
- 2) Availability of audio recording tools, where students can speak.
- 3) Talking with colleagues and friends by creating free web pages and ease of downloading audio files on them and taking the opinions of the participants on the page, which allows students to learn by sharing with others the right and wrong aspects of what is being done.
- 4) Access to virtual tools to learn the correct pronunciation of sentences. There are widely available tools linked to the Ubiquitous electronic environments. Also, students have a lot of smartphone or tablet tools, but they do not have the skills to access them, or that they are ignorant of using them because they are preoccupied with noneducational media.

Despite what the researchers mentioned, cyberspace allows users to share information, interact, exchange ideas, play games, participate in discussions or social forums, or social networking environments, and collaborative media, conduct business, and create user-friendly media among many other activities. Yet accessing and benefiting from it still unknown. This requires that the learner must be integrated into an electronic environment that allows him to share tasks and activities and implement them in an environment that contributes to the acquisition of study skills that must be achieved. This was not implemented in the phonetics lab, which should allow learners to acquire English speaking skills. In this regard, Paavola et al. (2004: 577) emphasized that collaboration tends to work in a group of two or more individuals to achieve a common goal, and consideration is given to assessing the contributions of each individual in the group, which works to consolidate relationships among the group members. Collaboration learning is one of the most important strategies that have proven their distinction and importance, as they provide participants with an opportunity to learn and share various sources of information, as well as the possibility of exchanging experiences among themselves. The main objective of collaborative learning is not limited to



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acquiring and sharing knowledge only, but also to gain the ability to build knowledge in innovative and new ways. The researchers believe that the user (student) participation in the podcast environment based on ubiquitous learning must conform to the following guidelines:

- Students use information sources to achieve the required skills and direct their efforts towards finding, collecting and organizing information from different learning sources, individually or collectively, according to the strategy set to implement this work.
- Add value to these resources by having students share them and build representations of their own knowledge to achieve specific learning objectives for phonemic English skills.
- Students are responsible individually and collectively for their work and learning activities, with each student working on a specific sub-work, but complementing the work of others, ultimately leading to a collaborative collective production.
- Integration of learners' knowledge with the knowledge of experts in the field (specialists in language or technology), which helps to overcome barriers during the learning process and keep abreast of scientific developments in the field.
- Giving learners responsibility for their achievements individually and collectively, which highlights the role of each learner individually and helps in evaluating his role individually in addition to evaluating the role of the learner as a whole.

Aggressive physical and psychological abuses that occur frequently on a student who appears to be weak and unable to defend himself against the attacker. Bullying is practiced by one student or group of students towards one student or group of students. The most dangerous type is that one which is repeated chronically and endlessly. Chronic bullying is antisocial behavior that leads to negative short- and long-term consequences for both victims and bullies.

Social learning theory is one of the most popular theories in explaining violence. It assumes that people learn violence the same way they learn other patterns of behaviors, and that this learning process begins with the family. For instance, some parents encourage their children to behave violently with others in some situations, and demand them not to be victims of violence. This is clear in our Egyptian environment when some defend beating fathers to their children using their famous justification, "They're bring them up." Also, when the child finds that the only way by which his father solves his problems with his wife or neighbors is violence, he resorts to imitating that. (Abllabout, 2015, 44).

Shanofo lee, 2016 study indicated the prevalence of cyberbullying and the prediction of cyber-bullying among Korean adolescents. The study aimed to study the prevalence of cyberbullying and the factors for perpetrating cyber-bullying with a national sample of 4000 adolescents selected through multistage cluster sampling. Participants were 2,166 boys (54.1%) and 1,834 girls (45.9%), grade 12 in 24 middle schools and 24 high schools across South Korea. Statistical analyzes of the survey data are summarized as follows:

**First**: 34% of students surveyed engaged in cyber-bullying. Bullies represented (6.3%), victims (14.6%), or both bullies and victims (13.1%). Boys had a higher percentage of cyber-bullying offenses than girls.

**Second**: The time the student spends on chat and social networking services (SNS), and commits bullying offline increases the risk of cyber-bullying.

Third: The results were discussed that the phenomenon of cyber-bullying among adolescents and youth in general is not related to parents' satisfaction with school life.

The beginning of bullying concept emergence was among students. Thus, most researchers have linked this behavior with the school environment as the most appropriate place for the emergence and practice of this behavior. The matter which has many negative psychological, social, emotional and academic effects that leave repercussions on both the bully and the victim, although the behavior of bullying in the school environment is linked to the emergence of these educational institutions. However, researchers interested in social relations did not pay attention to this phenomenon. They did not take it seriously, considering that what happens between students in schools is a kind of simple humor that does not exceed the limits of just joking between peers, which appears and then disappears automatically. Such theory was adopted until "Oloys" got through this phenomenon in 1991 (Mus'ad Abu Ad-Diyar, 2012, 37).

It is wrong to discuss the phenomenon being a one-sided problem of a victim who suffers harm. Rather, it is a two-sided problem with a strong impact upon societies. The first side, that needs more attention, treatment, and finding ways to solve, is the victim who is subjected to such a painful coercive act. The other side is the student or a group of bullying students who take violence as a consistent behavior in their dealings. This bully is another victim and his presence is more dangerous to society than the first. Thus, both sides are victims, both of them need psychological and behavioral treatment, and both of them must be freed from that harm. Together, they constitute the two elements of future nation-building, as the aggressor and the victim are essential members of all societies. If we neglect the offending student and do not rebuild him educationally and behaviorally, other children will be exposed to the same problem. The matter will contribute to increasing this phenomenon even more in society (Amal Al-Ammar, 2016, 228).

Khalid Safwat, founder of the "Egyptian mothers' revolution on the school curriculum", indicated that his son was subjected to bullying last year by a high school student who persecuted and insulted the son, just because he accidentally shot a ball with the other's face. The bully took the ball and bag from his son, threw the ball outside the school, and kept persecuting him. The father suggested to his son to explain to the social worker what happened, but she did nothing. The son continued to complain to his father daily that his right was wasted and no one has helped him. Thus, Mr. Safwat contacted the school director, but he did not find a solution. Finally, when his son became nervous and complained about such daily insult, Safwat decided to directly communicate with the bully student (Basma Khalil, 2018).



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# Cyber-bullying

Internet is a double-edged sword like all IT tools. The most significant example of the internet downside is cyber-bullying against individuals. New technology has spawned new types of violent behavior such as cyber-bullying which has attracted the attention of researchers and the media alike. Cyber bullying may come from different technologies such as cell phones and computers, where the bully can use text messages, chat rooms and social networking sites.

Cyber-bullying is defined as a behavior carried out via Internet or electronic or digital media, by an individual or a group through repeated communication that includes hostile or aggressive messages which aim to harm others. The identity of the bully may be unknown or known to the victim, and cyberbullying may occur inside or outside the school (Tokunaga, 2010).

It is also defined as the deliberate use of electronic communication tools to repeatedly harm an individual or group of individuals (Akbulut and Eristi, 2011).

Through the abovementioned definitions, cyber-bullying can be defined as a deliberate act of aggression by a group or individual using electronic means of communication, repeatedly and over time against the victim who cannot easily defend him/herself. Cyber bullying is a form of bullying that has emerged clearly in recent years, as the use of electronic devices such as computers and mobile phones by young people has increased.

# Methodology

The research adopts the quasi-experimental method using two groups: controlling and experimental one.

Participants:

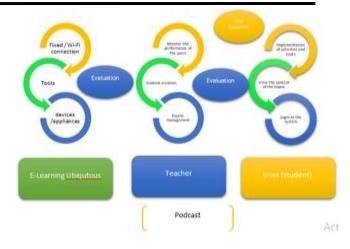
A random sample was selected from the second year students of the Academic English Department, who study the practical aspect of the phonetics lab course. Their number is (30). They were divided into two groups, the first was an experimental group, which numbered (15) students standing on the spread technology (Phones/Tablets), and the second group is taught using the method used in teaching (the phonetics lab), which is equipped with the faculty and its number is (15) students.

Design of the researcher:

The first group is taught using a podcast based on E-Learning ubiquitous (phones / tablets), while the second group is taught using the method used in teaching (the phonetics lab) provided by the faculty.

Framework for implementing podcasting

Podcasting techniques consist of relying on free web tools that can be viewed (audio or video) and a set of tools to support and receive tasks. In addition, activities designed using collaborative tools (documents, forms), and devices through which the content of the environment can be accessed (phone/tablet / or any other A fixed device). To increase students' interaction by watching them anywhere, which increases learning control, and is linked to the students' spatial and temporal status during learning. The environment provides clarity in the objectives that must be achieved for the English language skills required of students and provides support to learners before the start of experimentation, during experimentation, and after experimentation



**Figure (1)** Pedagogical Implementation Framework for Ubiquitous Technology Learning-Based Podcasting for Skills Development

Tools of the Research:

The research employs the following tools material were used: An EFL speaking skills checklist:

The second researcher prepared an EFL speaking skills checklist to determine the most appropriate speaking skills to students of the Faculty of Education.

Description of the checklist:

The checklist included 18 sub-speaking skills under 6 speaking items as follows:

- Good pronunciation.
- Choosing words to express the situation.
- Organizing the content of the dialogue.
- Choosing the time.
- Pauses in time.
- Good conclusion.

#### Validity of the checklist:

The speaking skills checklist was submitted to 4 jury members in the field of English language, and English language teaching. They were requested to check the sub-skills for their appropriateness to students of the Faculty of Education. The jury decided the number of sub-skills to only 18.

# EFL speaking skills Test:

The speaking skills test is aimed at measuring some EFL speaking skills students of the Faculty of Education.

- Formulating the initial form of the test: The second researcher formulated the vocabulary of the students' speaking skills test of the selected sample, which was read by the group of arbitrators on the test. Its number reached (18) items in the form of multiple choice, and one score was given for each item, to be the final degree of the test out of (18) degrees. Accordingly, the researcher developed instructions for the test to prepare students to answer the phrases.
- Preparing the specification table for the test: where the first and third researcher analyzed the content of the phonetics course and determined the skills of speaking skills included in the practical part of the course and in light of those goals. In addition, the researcher determined the type and number of questions appropriate for each goal. Consequently, the following specification table was prepared:



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Table (1) Table of Specifications for testing

Ration	Sum	Lessons
Good pronunciation.	22%	4
Selection the words to express on Situation.	17%	3
Organizing content of dialogue.	17%	3
Selecting the time.	17%	3
Poses in the appropriate time.	11%	2
Good Conclusion.	17%	3
Total	100%	18

# Determining the validity of the test:

#### Credibility of the arbitrators:

The second researcher presented the initial picture of the skills to the group of arbitrators to ensure that the questions set are honest and were designed to measure everything that was set to measure, as it covers all skills, in addition to their opinions and observations about the clarity of the formulation of the questions, their scientific accuracy and the method of answering, and the suitability of the questions to the research sample, In light of what the arbitrators have reviewed, the researcher has made all the necessary modifications up to the final images of the test.

- Internal consistency validity: The researchers calculated the internal consistency validity by retesting. The value of the correlation coefficient was (0.876), which is statistically significant at the 0.01 level, indicating that the test has a high degree of validity.
- The stability of the Test of the skills: The stability
  of this test was confirmed by calculating the
  Alpha Cronbach reliability coefficient (0.763),
  which is a value that indicates that the scale has a
  high degree of stability.

**Secondly:** Prepare a user engagement scale in a blogging environment based on pervasive learning:

The objective of the scale: Identifying the sources of user participation among students of the Faculty of Education, second year, in an electronic environment.

Preparing the initial form of the scale: The researchers reviewed much literature to identify the mechanisms and methods of user (student) participation in electronic environments, especially the learning-based blogging environment, which fits with the research sample. These axes are:

- Student's participation in reaching the course content.
- The student's participation in the course's learning activities and tasks.

 Student participation in helping others in the environment.

The method of correcting the scale: The researchers put the scale in its initial form of 20 items. For positive answers, the scale items were either "agree with a high degree" (4), "strongly agree" (3 marks), agree (2 marks), disagree (1 degree). As for the negative statements only, they were corrected in reverse: agree with a high degree (1) strongly agree (2 points), agree (3 points), and disagree (4 points).

The scale of user participation in the electronic environment (the blogging based on Ubiquitous learning) was presented to a group of arbitrators devoted to psychology. The percentage of agreement on the dimensions and phrases of the scale was 95%. In light of the arbitrators' instructions and their suggestions, the total number of items became (16) distributed over the scale axes as follows:

Table (2) The dimensions of the user participation scale and the number of its items

Dimensions	Number Of Phrases	The Ratio
Student's participation in reaching the course content.	6	35%
The student's participation in the course's learning activities and tasks.	5	30%
Student participation in helping others in the environment.	6	35%
Total	17	100%

#### final of the scale Version:

The researchers prepared the final image of the user engagement scale for university students from the Faculty of Education after the items were distributed as in the table (3)

Table (3) The dimensions of the user participation scale and the number of its items

Dimensions	Number of items
Student's participation in reaching the course content.	1 4 7 10 12 15
The student's participation in the course's learning activities and tasks.	2 5 8 11 13
Student participation in helping others in the environment.	3 6 9 4 17

# Psychometric properties of a scale User participation:

To check the validity of the scale, the researchers use some statistical methods as follows:

Internal consistency validity: the scale was applied to an exploratory sample of same students whose total number was (70) student and a difference temporal capacity of 21 days, in order to confirm the clarity of the paragraphs of the scale on the rationing sample, as well as knowing the correlation coefficient



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between the degree of each item and the total score of the axis to which the item belongs:

Table (4) the values of the correlation coefficients between the score of each item and the total score of the axis to which the item belongs.

Dimensions	Correlation coefficient values	level of significance	
Student's participation in reaching the course content.	0.863	0.01	
The student's participation in the course's learning activities and tasks.	0,877	0.01	
Student participation in helping others in the environment.	0.893	0.01	
Total	0,879	0.01	

# The Stability of the Scale: Alpha Cronbach coefficient stability:

the stability of the scale was calculated using the Alpha Cronbach coefficient, where this method results in an internal consistency coefficient of the scale structure, which is called the homogeneity coefficient. And Table No. (6) shows Alpha Cronbach stability coefficient

Table (5) the stability of the scale axes and the scale as a whole by the Alpha Cropbach method

Dimensions	Alpha Cronbach's coefficient values	level of significance	
Academic Specialization	0.788	0.01	
Self-esteem.	0,841	0.01	
social skills.	0.836	0.01	
Total	0,813	0.01	

Setting standard criteria for the availability of User participation in a ubiquitous learning-based podcast environment. To determine the criteria adopted in the research. firstly the length of cells according to the Likert scale the fourth had been determined by calculating the range between degrees (4-1 = 3) then split it On Larger Values On the scale to get On Length cell, Which represented  $(3\div 4=0.75)$ . Then this value was added to the lowest value in the scale (the beginning of the scale is "1") in order to determine the upper bound for this cell. Thus, the length of the cells became as shown in the following figure:

highest value	1000	
less value		range -
Therefore, the length of the ran-	ge becames	
	3	range
0.75		length
	-	-

Figure(2) determine the criteria adopted in the research

The number has been added as the outgoing ratio of the length of the range to the lowest degree, so it becomes 1,75. According to these procedures, the scale became permissible to apply to the basic research sample.

# **Results & Discussion:**

# The First hypothesis:

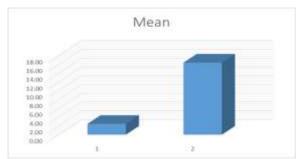
Which states, "There is a statistically significant difference at the level (0.05) between the average ranks of the students' scores in the research group in the pre and post applications to test speaking skills in favor of the post application."

To verify the validity of this hypothesis, the researchers compared the mean scores of the experimental group using Wilcoxon test Wilcoxon non-parametric test, in order to reveal the significance of the differences between the two applications before and after the experimental group. The table (6) includes the findings of the research:

Table (6) The significance of the differences for the ranks of the average scores of students on the achievement test, given that  $n=15\,$ 

Measurement	Application	N	Meaning Rank	Sum Of Ranks	z	Asymp. Sig. (2- Tailed)	Size Effect
Speaking	Negative Ranks	0	0.00	0.00	3.44	0	big
test	Positive Ranks	15	8.00	120.00	3.44	Ü	oig

In light of the table (6), it is clear that there are statistically significant differences at the level of 0.01 between the average ranks of the experimental group members before and after the application of the podcast environment based on ubiquitous learning. The differences were in the direction of the post application; where the value of Z between the two applications (3.44), which is a statistically significant value at the significance level (0,01). Thus, the hypothesis has come true and the differences in the averages can be clarified in the following figure:



**Figure(3)** a graph of the differences between the mean of the experimental group in the pre and post application



ISSN (Print): 2682-3918 - ISSN (online): 2682-3926

Volume2 / Issue3, August 2021 DOI: 10.21608/ihites.2022.113250.1102

# The second hypothesis:

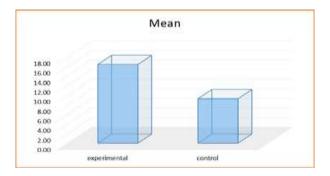
which states that "there is a statistically significant difference at the level (0.01) between the average ranks of the students' grades in the first experimental and controlling groups in the post application to test speaking skills in favor of the experimental group."

To test the validity of this hypothesis, the researchers used the Mann-Whitney test. It is also an alternative non-teacher test to t-test using the SPSS for windows statistical package (V 22) to calculate the significance of the differences between the mean scores of the students of the two groups in the post-measurement speaking skills test. The results are in the table (7).

 $\begin{tabular}{ll} \textbf{Table (7)} & values (Z,W) and its significance in the dimensional \\ measurement \end{tabular}$ 

Scale type	Measurement type	Groups	Z	Meaning Rank	Sum of Ranks	W	Z	Asymp. Sig. (2-tailed)
Speaking test	POST TEST	al	15	23.00	345.	120	4.70	0.01
		trol	15	8.00	120			

**Table** (7) shows that there are statistically significant differences at the level of) 0.01 between the average ranks of the students' scores of the experimental and control groups in the post-test in the speaking skills test. This goes in line with the results of the table showing that the value of (W) at (120.00), and the value of (Z) was at the level of 4.705, which is a statistically significant value at the level of Significance (0.01). The differences in the averages can be clarified in the following figure:



**Figure(4)** Diagram of the differences between the averages of the experimental and control group in the post application of the speaking skills test.

# The third hypothesis

which states: "the effectiveness of the podcast design based on ubiquitous technology to achieve user participation in the electronic environment'.

The scale was applied to a sample of students to identify the order of students' feelings after their studying using the podcast design based on the ubiquitous learning environment. The weighted average ratio, percentage, and priority were calculated on the scale expressions to determine the extent to which students' participation improved for the experimental group Table.

**Table (8)** the weighted average percentage, the percentage, and the priority on the scale statements.

Skills	Ferries	Weighted Average	Availability Level
	I feel that my ability to communicate with others has improved.	3.77	Very large
	2. I feel that the skills I have achieved are not what I would have liked.	3.72	Very large
Student	3. I feel that the content in the designed environment has been effective for me.	3.89	Very large
Student participatio n in linking to the course content	4. I feel satisfied after achieving the results I was hoping to reach.	3.93	Very large
	5. I felt that the course content helped me acquire new skills that I had not acquired before.	3.75	Very large
	6. I feel that the content of the environment used is different from the traditional environment.	3.72	Very large
	I feel that the activities increased my interaction to achieve the required skills.	3.78	Very large
Student participatio n in the course's learning activities and tasks	2. I feel that the sources of activities related to the activities are new to me and I have achieved an experience that I did not expect to reach.	3.25	Very large
	3. I feel that the tasks in the course are heavy and require effort above my capabilities.	4	Very large



ISSN (Print): 2682-3918 - ISSN (online): 2682-3926

Volume2 / Issue3, August 2021 DOI: 10.21608/ihites.2022.113250.1102

	4. I feel that achieving tasks in a podcast environment is related to the skills to be achieved.	4	Very large
	5. I feel that the diversity of tasks has helped me achieve my educational goals.	4	Very large
	1. Our custom I don't feel afraid in dealing with the environment used.	3.75	Very large
Student participatio n in helping others in the environme nt	2. It felt like working through the environment in a team spirit.	4	Very large
	3. I feel ashamed when I share my opinion with others.	3.72	Very large
	4. Our custom I am reluctant to talk to peers within the environment.	3.75	Very large
	5. I felt extra confident working on commentary and discussions with others.	3.25	Very large
	6. I feel very kind after helping my peers to learn the skills to be achieved.	3.25	Very large
Total		3.32	Very large

According to the table (8). it is shown that the performance scores of students' participation in achieving skills using the podcast design based on the ubiquitous learning environment based on the scale that their performance percentage has been achieved with an average score of 3.71, which represents a large degree of performance according to the scale expressions and this indicates the design of the podcast based on The ubiquitous learning environment increases the participation of students in achieving the skill aspects.

# Conclusion

In light of the research, it is manifested that the design of blogging based on the ubiquitous learning in electronic environments, and the mechanisms it includes for implementing is considered one of the urgent topics in the discussion regarding the speaking skills to be achieved by students. Achieving user participation is achieved by interacting with discussion and comments, that the open dialogue about the designing environments with the development of various mechanisms for displaying content within the podcast environment, which led to students' acquisition of English language skills and a high rate of participation in the required performance, became tangible. Electronic environments such as the podcast environment have many features that help

students learn the required skills Speaking (participation, interaction, discussion, comments, blogging) and spread-using phone and tablet tools that helped student's access content at any time and any place and outside the university and its walls. In sum, the spread of the network should be directed towards student education in the twenty-first century to achieve academic skills, personal skills, as well as professional aspects that can be used in the labor market.

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ISSN (Print): 2682-3918 - ISSN (online): 2682-3926

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