



**Sudan University of Science and Technology**  
**College of Graduate Studies**



# **The Use of ICT to Enhance Learning of Arabic Language for Non-Native Speakers**

استخدام تكنولوجيا المعلومات والاتصالات لتعزيز تعلم اللغة العربية للناطقين بغيرها

**A Thesis Submitted in Partial Fulfillment of the Requirements of  
Master Degree in Information Technology**

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

﴿وَأَنَّهُ لَتَنَزِيلُ رَبِّ الْعَالَمِينَ (192) نَزَلَ بِهِ الرُّوحُ الْأَمِينُ (193)﴾

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صدق الله العظيم

سورة الشعراء الايات (192-195)

# Dedication

*my mother and my father*

*From them, I picked up letters, learned how to pronounce words, formulate  
phrases, and control rules in this field*

*My dear teachers.*

*To those who spared huge effort in providing information*

## Acknowledgment

*First of all, I would like to thank Allah, the almighty God, for giving me the courage to complete this study. I am very grateful to Dr. **Abuagla Babiker Mohammed Babiker** has been the ideal thesis adviser, the wise advice, insightful criticisms, encouragement the writing of this thesis in innumerable ways. I am thankful to him for his supervision and support from the beginning to the concluding level.*

### *Teachers of Sudan University of Science and Technology*

*My thanks extend to those who always encouraged me from the beginning until the completion of this thesis*

.

## **Abstract**

As a result of the developments in this era (the information age), the use of information technology has been a qualitative development in the service of the educational process as it provides many of the effects that contribute clearly to the presentation of the content in an interesting manner through videos, colors, sounds, images static and mobile conversely to traditional methods and teaching methods in education.

Through the study, the researcher concluded that the use of technology in teaching the Arabic language used as an aid and that most systems that may include electronic resources to teach the Arabic language do not follow the basics of a clear or reference methodology for teaching Arabic to non-native speakers.

The aim of this study is to develop an educational framework that helps in learning Arabic for non-native speakers by integrating the traditional curriculum with educational events using modern techniques, creating an educational platform according to the educational framework, presenting educational materials in attractive and interesting ways and interactive activities.

## المستخلص

نتيجة للتطورات التي ظهرت في هذا العصر (عصر المعلومات) فقد شهد استخدام تكنولوجيا المعلومات تطوراً نوعياً في خدمة العملية التعليمية إذ أصبح يوفر العديد من المؤثرات التي تسهم بوضوح في تقديم المحتوى الدراسي بشكل مشوق من خلال توظيف الفيديوهاات والألوان والأصوات ، والصور الثابتة والمتحركة خلافا للطرق والوسائل التعليمية التقليدية المتبعة في التعليم.

من خلال الدراسة توصل الباحث الى أن إستخدام التكنولوجيا في تعليم اللغة العربية لا يتعدى استخدامها كوسيلة مساعدة وأن أغلب الأنظمة التي قد تتضمن موارد إلكترونية لتعليم اللغة العربية لا تتبع أسس منهجية واضحة أو مرجعية لتعليم اللغة العربية لغير الناطقين بها.

تهدف هذه الدراسة إلى تطوير إطار تعليمي يساعد في تعلم اللغة العربية لغير الناطقين بها عن طريق دمج المنهج التقليدي مع الأحداث التعليمية بإستخدام التقنيات الحديثة ، وإنشاء منصة تعليمية وفقا للإطار التعليمي وعرض المواد التعليمية بطرق جذابة ومثيرة للاهتمام وأنشطة تفاعلية .

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**List of Terms:**

ICT	Information and communications technology
MYSQL	My Structured Query Language
WAMP	Windows Apache MySQL PHP
HTML	Hyper Text Markup Language
PHP	Hypertext Preprocessor
AECT	Association for Educational Communications and Technology
OERs	open education resources
MOOC	Massive Open Online Courses

# **Chapter One**

## **Introduction**

### **1.1 Overview**

The Arabic language occupies a great position in the thoughts of native and non-native Muslim speakers who seek to learn it because it is related to the Holy Qur'an (the last holy book that Comes down to the prophet Muhammad (Peace be upon him)) and it is the language used to worship Allah. Non-Muslims seek to learn Arabic to achieve socioeconomic or political purposes. Thus, countries exert more efforts to disseminate their learning and establish institutes and specialized departments for two purposes as a response to the need of the market to get a financial income by the educational institution and for a religious need where learning Arabic is means of performing worship such as reciting the Holy Qur'an, some quoted zikr, and reading and understanding the Holy Sunnah. Therefore, many reasons motivated creating the electronic programs of learning the Arabic language, including meet the needs of the learners within broadening educational levels that begins from beginners to professional practitioners ( Alsrhid, A. M. M, 2013).

There is an increasing need to understand the Arabic culture and language. However, the research and infrastructure available to help facilitate learning and teaching Arabic are not keeping pace with these growing needs. There is also a problem that students cannot speak fluently even though they have high academic levels, which can often be reflected in a lack of desire and distrust when it comes to speaking. Most students often need to encourage them to participate in speaking activities. Students must be aware that when they are in the system, they must be physically and mentally prepared to face all challenges (Alowaydhi, W. H., 2016).

## **1.2 problem Statement**

The problem of research is the lack of resources and electronic activities that correspond to the increased number of those wishing to learn Arabic as well as geographical dispersion of those who want to learn Arabic all over the world. In addition, there was no providing program for acquiring Arabic language skills.

## **1.3 Objectives of The Study**

- Building an educational framework that combines the traditional curriculum and educational events using modern technologies.
- Create an educational platform according to the educational framework.
- Provide guidance and academic guidance to platform users.
- Encourage students to participate positively through interactive learning.

## **1.4 The significance of the Study**

- Promoting the culture of ICT in teaching Arabic language and making good use of it in educational activities.
- Contribute to the dissemination of language and education in Arabic.
- Explain the impact of the use of technology in teaching Arabic to non-native speakers in curriculum design and teaching methods.
- Contribute to promoting the provision of free educational resource.

## **1.5 The methodology of The Study**

To achieve the main objectives of this study, building a knowledge-based learning framework helps correct learners who want to learn Arabic in a more interactive and entertaining way. To collect information, the researcher interviewed several experts and specialists in this field, reviewed the documents and previous studies, as well as

the direct observation of several educational platforms to teach Arabic to non-native speakers.

Use the Learning Framework to create an educational system that combines the traditional curriculum and educational events with new technologies. The platform is also designed using SQL Server to create and use databases (HTML-PHP-JavaScript) to design system screens.

## **1.6 Thesis Structure**

The thesis is organized as follows. chapter one presents an introduction to research, the problem of research, importance, objectives, methodology, and structure of the thesis. Chapter two represents the theoretical background and gives a review of the literature on the various systems that were previously developed and their disadvantages. Chapter three contains the methodology, techniques, and tools. Chapter four Description and Implement Chapter five contains the result and description. Chapter six contains conclusions and recommendations.

## **Chapter Two**

### **Theoretical Background**

#### **2.1 Introduction**

This chapter contains relevant and background works related to the teaching of Arabic to non- native Arabic speakers and the impact of the use of modern technology in teaching them.

#### **2.2 Background**

##### **2.2.1 The concept of educational means:**

##### **Definition of educational means:**

The definitions of teaching aids differed as follows:

Nayef Mahmoud Maruf believes that educational aids are tools, devices, and materials used by the teacher to facilitate and improve learning. It is education because the teachers use it in an educational institution and students benefit from it (Kutbiddinova, R. A., & Eromasova, A, 2016).

Ahmed Salem defines it as a subsystem of the educational technology that includes educational materials, tools, and devices used by the teacher or learner or both in educational situations in a systematic manner to facilitate the teaching and learning process.

the Association for Educational Communication and Technology (association for education and communication technology-AECT) It is everything and the format used to convey information.

The researcher concludes from these definitions that the educational means are a subset of the educational technology system, which includes the main components, namely educational materials, tools, and devices, with the aim of achieving the

educational goals. The use of teaching aids is not limited to the teacher but can be used by the learner alone, Education or shared with the teacher.

### **2.2.2 The use of technical means in teaching Arabic to non-native speakers:**

The use of modern techniques in teaching Arabic is the base for the development of this language. Example if learning is compared to Arabic and English, there is a wide gap in Arabic language students. For example, English primarily relies on techniques such as recorded tapes, images, educational graphics, computer games, and movies. While the Arabic language learner is far from this language because the lack of these techniques, the learners still know the rules and foundations of the Arabic language without ambition suited to the greatness of this language, so there is an urgent need to introduce modern technology to teach and develop the Arabic language.

### **2.2.3 The importance of using educational tools in education:**

- Increase learner's concentration.
- Works positively on the learner's activity.
- Fix the information in the mind of the learners for a long time.

Many studies in the United States have confirmed that the information obtained by the learner through practice is fixed in his mind more than other learning methods (salim, a, 2004).

(table 2.1) The following table illustrates the methods of acquiring information through the learning process and the effectiveness of learning through practice other methods:

<b>Get information</b>	<b>Percentage</b>	<b>Priority</b>
Attractive system	90%	1
Speech recognition	70%	2
Videos	50%	3
Test	30%	4
Voice record	20%	5
Text editor and test	10%	6

table 2.1 Methods of acquiring information

#### **2.2.4 Advantages of using modern ICT technologies in the educational process:**

- Provide educational material in a suitable degree to the abilities of students.
- Provide opportunities to interact with the learner such as educational dialogue.
- It is easy for the student to choose what he wants at the right time and place.
- Create an active and interactive learning environment between the machine and the human.
- Provide element excitement and suspense.

#### **2.2.5 Use of (Information and Communication Technology-ICT) in language education:**

Modern technologies are used in language learning in particular; to learn language skills, whether native language or foreign language. It also serves as an instructional tool to assist language learners to develop their language skills, thus providing an



integral component in addition to other teaching methods, thus creating an active learning environment that is linguistically rich.

### **2.2.6 Use of (Information and Communication Technology-ICT) in the Arabic language:**

Technology can be used to teach Arabic in the following processes:

- Reading is one of the areas that can be developed by using the technique of assimilation, word processing and reading speed.
- In writing the use of word processing programs gives the learner freedom to address text such as instant correction, spell checking, and translation.
- listening is a process of one's awareness and attention to sounds or patterns of speech and continue through the identification of specific audio signals and ends with the absorption of what was heard, like audio and video system.

## **2.3 Open Educational Resources – (OERs):**

### **2.3.1 Definition:**

The idea of open educational resources (OER) has numerous working definitions. The term was firstly coined at UNESCO's 2002 Forum on Open Courseware and designates "teaching, learning and research materials in any medium, digital or otherwise, that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions. Open licensing is built within the existing framework of intellectual property rights as defined by relevant international conventions and respects the authorship of the work". Often cited is the William and Flora Hewlett Foundation term which defines OER as:

Teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use and re-purposing by others. Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge (Khanna, P., & Basak, P. C, 2013).

## **2.4 Related Works**

1. Study (Dr. Arif Mohammed Mufleh Alsrhid, 2013) This study aimed to identify the difficulties faced by foreign students in the programs of learning Arabic to non-native speakers, to identify psychological and social learning difficulties, through a series of research and studies on Arabic language programs for non-native speakers.

The researcher found difficulties in writing and identifying the different versions of the letters because of the following:

- There is a set of similar characters in the general frame and the difference is only in the numbering process. Different constructions of the Arabic sentence.
- Focus on reading and writing and neglecting speaking and listening skills.

2. Study (Bader S. Dweik<sup>1</sup>, \*, Mohammad A. Al-Shallakh<sup>2</sup>, 2015) This study aimed to investigate the difficulties that non-natives face in learning Arabic at Jordanian Public Universities. It was also attempted to find some solutions to such difficulties. The researcher concluded that:

The existence of different varieties of Arabic constituted a major difficulty. The results also indicated that the materials used in teaching and classroom activities were not helpful for students to develop communicative competence in Arabic.

Considering these conclusions, different solutions were suggested to overcome these difficulties.

3. Study (Wafa Hafez Alowaydhi 2016) This study aimed to standardize the program of learning Arabic for non-native speakers in Saudi Electronic University according to certain standards of total quality. The results of the study showed that 100% availability of total quality in all program's domains. The study recommended marketing of the program of learning Arabic for non-native speakers in Saudi Electronic University according to the requirements of educational revolution in the concepts of knowledge economy according to economic plan funded by Ministry of Education in Saudi Arabia.
4. Study (Jamil Itmazi 2016) The aims of this study showed that it is not possible to continue teaching Arabic in the old ways and means of the contemporary learner, which is often based on modern Alknaronic means. The researcher declared that the collective decisions open source (MOOC) can be designed to contain open sources of education that benefit the learner, improve Arabic language and solve the problem of dispersion of learners who want to study the Arabic language of non-native speakers in Europe and America and their peers for the means of electronic means and learning Continue.
5. Study (Azniwati Abdul Aziz\*, Mohamed Akhiruddin Ibrahim, Mohammad Hikmat Shaker, Azlina Mohamed nor 2016) The objective of this article: is to study the teaching techniques applied by the non-Arabic speaking lecturers when they carry out the teaching and learning process of Islamic studies to non-Arabic speaking students. The researchers concluded that that the teaching techniques applied in teaching Islamic studies for non-Arabic speakers are suitable with the ability and

basic knowledge of students. Result also found that the techniques used are significant in teaching process for non-Arabic speaking students in higher education level.

6. Study (Ashinida Aladdin 2010) The study aims at examining the respondents' attitudes towards learning foreign languages in general, towards learning the Arabic language and attitudes towards Arabic native speaker. This study also aims at investigating the motivational orientations among the NMMLAs in learning Arabic as a foreign language. The findings reveal that the NMMLAs' held high positive attitudes towards foreign languages and held moderate positive attitudes towards the Arabic language and its native speakers. As to motivations, the respondents were instrumentally motivated to learn the Arabic language with the need to fulfill the university requirement having the highest ranking whereas the intrinsic and integrative motivation came second with the same mean score
7. Study (Prof. Bader. S. Dweik & Amani J. Abu-Armies 2015) This paper investigates the attitudes of non-native learners towards learning aspects of Arabic culture. Results showed that the non-native learners of Arabic have positive attitudes towards Arabic culture and they favored aspects such as rules and behaviors, customs and festivals, political institutions, history, family life, and food.
8. Study (Noor Anida Binti Awang 2013) This study aims to investigate strategies for Arabic speaking skills enhancement through group work activities. It highlights the effectiveness of group work activities in teaching Arabic speaking skills among first-year Malay undergraduate university students studying the Arabic language. The findings of the study indicated that group work activities have a crucial impact on speaking foreign language skills. They help to increase the level of confidence

among students who are shy, easily get panic and fear of speaking the Arabic language in front of peers. Group work activities are effective to develop speaking skills among students, but it is depending on how the lecturer implements group work activities in teaching and learning Arabic as a foreign language.

9. Study (Dr. Tayseer Mohammed Al-Ziadat 2016) The study attempts to reveal the difficulties and problems, and to provide solutions and suggestions to promote lessons of teaching rhetoric due to their importance in learning the Arabic language, regardless of the desired objectives of learning it: religiously or educationally. The researcher used the descriptive approach and the direct observation in the detection of the difficulties faced by non-native speakers of Arabic. The researcher discovered several reasons and problematic issues which prevent learning rhetoric properly. These reasons and issues reside in the entire educational process, beginning with the student and ending with the teacher, and everything in-between ranging from the class environment to syllabus book ... etc. The researcher presents the problems and provides some of the scientific and practical solutions to enhance and improve lessons of teaching rhetoric.
10. Study (Hidayat Ibrahim Al-Sheikh Ali, Saleh bin Hamad Al-Suhaibani, 2012) This research aims to achieve the following objectives:
  - Survey and identify sites that are interested in teaching Arabic to non-speakers on the World Wide Web
  - Determine the criteria according to which these sites can be evaluated according to specific scientific bases
  - To evaluate those sites in the light of the previous criteria: to show the pros and cons in these sites.

## **Summary:**

To develop a proposed vision in the light of the above for a website through which to teach Arabic to non-native speakers. This survey has resulted in a deficiency in the method of site design and the traditional way in the presentation of linguistic content and attention to some language skills at the expense of other language skills.

- There is no doubt that the above studies addressed the problems and difficulties of teaching Arabic language and the use of modern techniques in learning, which is, of course, different from the current study. Some of these studies dealt with the problems of teaching Arabic to groups that may speak Arabic. Learning process. The study conducted by the researcher is a study related to non-Arabic speakers, thus different objectives and tools and designing an integrated approach based on modern technology. However, standing on these studies is very important, as the researcher reported from previous studies in the detection of the problems and difficulties of learning Arabic to speakers to explore the problems and difficulties related to non-Arabic speakers.

### **2.4 A survey of some sites that teach Arabic:**

The researcher was able to access several sites that may include electronic resources to teach Arabic and explains the lack of a site on the basis of a clear methodology or reference to teach Arabic to non-native speakers!

Given these and similar educational sites and services, we can mention some general observations that apply to many of them:

- Lack of a clear methodology in providing scientific materials in different parts.
- Gravity weakness in site design.
- Insufficient scientific content for the needs of learners due to lack of some advanced levels.

- Lack of respect for the principle of interaction between the components of the educational process; the concentration of some sites on the provision of scientific materials without attention to the extent of interaction of learners with the content provided.
- Poor evaluation procedures and lack of incentives to continue.
- The efforts of the site's founder (individual or entity) shall cease at the end of the construction period and the actual beginning of the site.
- The renewal of the content and the mechanism has stopped or frozen for a long time without updating.

Table 3.1 contains a list of sites that may include e-learning decisions.

Subject	Platform / Site	Link	Describe
Training of teachers of Arabic language for non - native speakers	Rwaq	<a href="https://www.rwaq.org/courses/arabic">https://www.rwaq.org/courses/arabic</a>	A series of lectures for teachers of Arabic for non-native speakers to improve their knowledge and educational skills.
Arabic Language Lessons	School Arabia	<a href="http://www.schoolarabia.net/asasi_a/duroos_3_4/arabi_main_1.htm">http://www.schoolarabia.net/asasi_a/duroos_3_4/arabi_main_1.htm</a>	Digital Knowledge Foundation provides a free interactive learning and learning environment students
The teaching Arabic to non-Arabic speaking	Arabic Language Institute for Non-native speakers	<a href="http://iqra.mediun.edu.my/eBooks/index.htm">http://iqra.mediun.edu.my/eBooks/index.htm</a>	The Institute for Teaching the Arabic Language for Non-Native Speakers An electronic program for non-profit students
Learn Arabic	Madinah Arabic	<a href="https://www.madinaharabic.com/learn-arabic.html">https://www.madinaharabic.com/learn-arabic.html</a>	a website that would teach Arabic for free
Arabic vocabulary	Language Guide	<a href="http://www.languageguide.org/ar/">http://www.languageguide.org/ar/</a>	Explore the world of Arabic vocabulary in a sound integrated guide
Learn Arabic	speak7	<a href="http://arabic.speak7.com">http://arabic.speak7.com</a>	Teaches the Arabic language for free, his lessons are available to anyone who wants to speak in Arabic, knowledge of grammar, vocabulary, expressions, and phrases.
Learn Arabic	busuu	<a href="https://www.busuu.com/dashboard#/timeline/regular/ar/a1">https://www.busuu.com/dashboard#/timeline/regular/ar/a1</a>	Is a free language learning site? The Arabic learning cycle is divided into different levels, the first level as a beginner teaches you some basic language. Then the middle level and there is a section to improve your writing skill in Arabic.

**Table 2.2: Details sites to teach Arabic**



## **Chapter Three**

### **Methodology, Tools, And Techniques**

#### **3.1 Introduction**

This chapter discusses the study procedures, including the methodology used in this study, the strategies used to collect data, tools, and techniques used to design and implement the proposed framework.

#### **3.2 The Methodology**

After the survey and evaluation of the reality of the use of modern ICT technologies in the teaching of Arabic to non-native speakers system has been selected based on knowledge and provide the material in a simple and fun based on the idea of design of this framework to register in the system and then work to determine the level ,then go to the appropriate level and completion of the educational process.

#### **3.3 Tools and Techniques**

data collected through previous research, related studies, interviewing a number of experts and specialists and visits to the Center for Teaching Arabic to Non-Speakers at the Open University of Sudan. To create dynamic Web applications WampServer, which provides Apache2, PHP, MySQL, and MariaDB and Adobe Dreamweaver is a special Web development tool from Adobe Inc.

JavaScript is one of the modern technologies of the World Wide Web that enables interactive web applications. The vast majority of sites you use and all major web browsers have a JavaScript engine dedicated to its implementation. (Liu, B & Yang, J., 2018.).

### **3.4 Search Procedures**

The procedures of this research are conducted in two frameworks:

#### **3.4.1 Theoretical Framework:**

Includes:

1. A descriptive survey: to determine the extent to which information technology is used in teaching Arabic to non-native speakers.
2. Evaluate the current situation of the use of technical aids in teaching Arabic to non-native speakers.
3. Review the views of experts and specialists in the field of the global network in education in general. And in teaching the language in general. As well as specialists in the field of curriculum and teaching methods.
4. Consideration of previous researches and studies that dealt with the variables of the current study
5. Review strategies of employing information technology in teaching the Arabic language with the aim of:
  - To meet the required standards in the design of educational means and how to provide educational materials through them.
  - Use in building tools that can be used in the current study and how to apply them.
  - Learn about the technical options offered by technology in education.

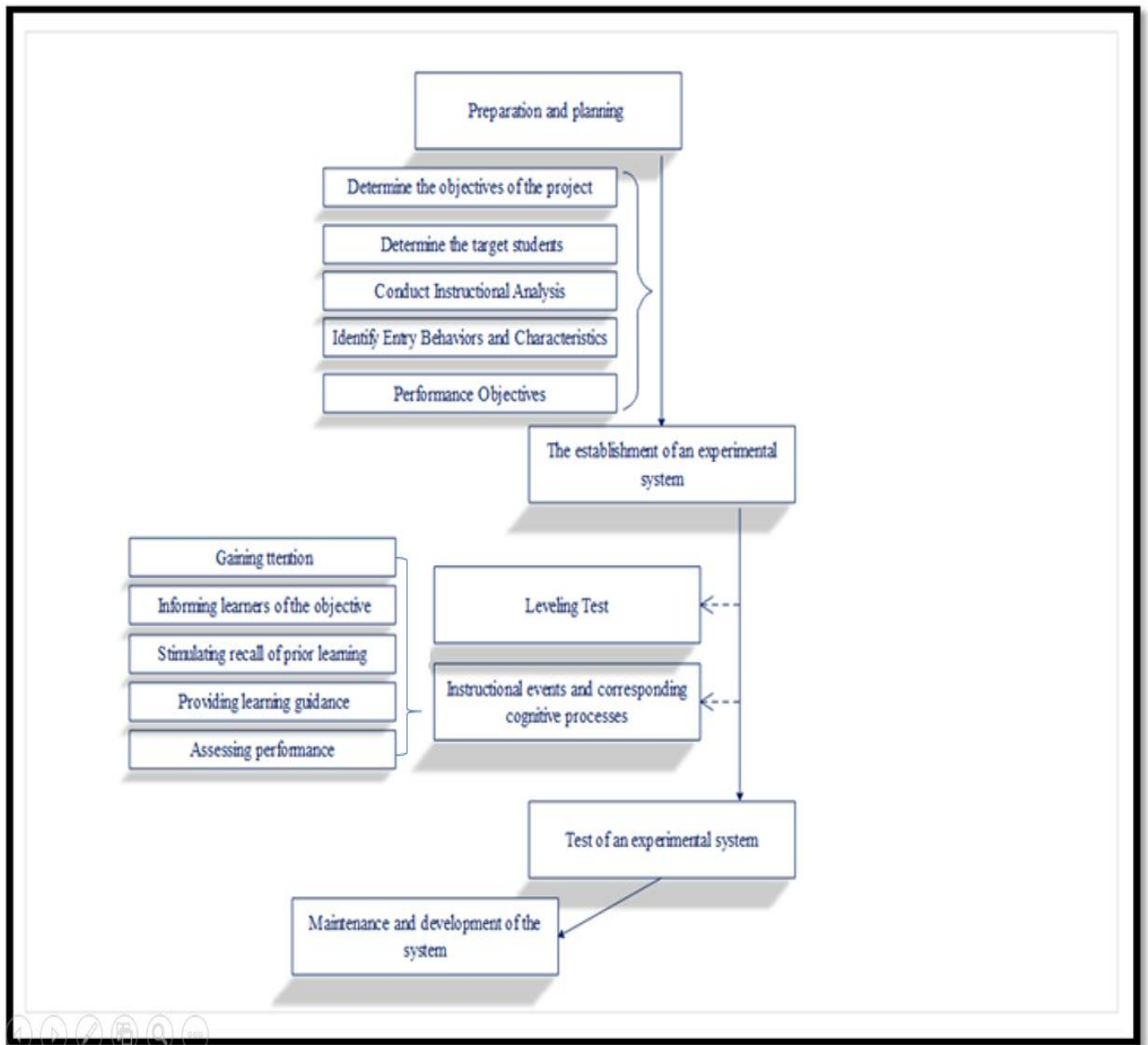
#### **3.4.2 Operational framework:**

Includes:

- The design of an educational platform in accordance with the proposed model will help non-Arabic-speaking students learn about it.

### 3.5 Educational Framework:

The following is a proposed framework for a pilot system that helps any student to learn, especially Arabic language students, at the lowest cost. The framework consists of the following (see figure 1):



**Figure 3.1 Educational Framework**

### **3.5.1 Preparation and planning phase (Dick ,w ,l, 1996) :**

It is the first and important stage that represents the planning of the proposed system and the setting of the expected objectives. It may require the development of a reference committee representing the following roles:

- **Information Technology Expert:**

declared that it useful and modern way of learning.

- **Education techniques Expert:**

Explained that it can be used as educational means, the teachers can use it to facilitate the process of teaching and learning.

- **Teaching Supervisor:**

Declared that as a teacher thought it is a good idea, but the teacher's role is crucial in the process of learning due not all the students can be serious learn themselves and have smart devices.

- **Curriculum and teaching methods Expert:**

Confirm that there are no specific standards for the curriculum.

#### **The operations at this phase:**

##### **1) Determine the objectives of the project**

Use criteria to define educational goals to decide which one should be achieved before the educational development process begins.

##### **2) Determine the target students**

It identifies the collection of information about the knowledge, skills, and attitudes of target learners as well as information about the environment in which they will learn.

### **3) Conduct Instructional Analysis (Gagné, R., 1992):**

Purpose: To determine the skills involved to gain a goal

- Task Analysis (procedural analysis): about the product of which would be a list of steps and the skills used at each step in the procedure
- Information-Processing Analysis: about the mental operations used by a person who has learned a complex skill
- Learning-Task Analysis: about the objectives of instruction that involve intellectual skills

### **4) Identify Entry Behaviors and Characteristics**

Purpose: To determine which of the required enabling skills the learners bring to the learning task:

- Intellectual skills.
- Abilities such as verbal comprehension and spatial orientation.
- Traits of personality.

### **5) Performance Objectives**

- Purpose: To translate the needs and goals into specific and detailed objectives.
- Functions: Determining whether the instruction related to its goals.
- Focusing the lesson planning upon appropriate conditions of learning.
- Guiding the development of measures of learner performance.
- Assisting learners in their study efforts.

#### **3.5.2 The establishment of an experimental system:**

This phase includes the establishment of the pilot system and access facilitation, enabling the availability, dissemination and wider participation of this course. This phase includes the completion of contents and construction of educational and training activities. Continuing review of the contents and activities of the course for

modernization and development, in the theoretical or practical part of the learning resource, or more effective methods of learning, or observations and comments from field experts or colleagues and students themselves. This phase includes two basic processes:

### **1)Leveling Test:**

Before beginning the learner to initiate entry into the system and benefit from the material must be prepared to test to determine the level of knowledge in Arabic, accordingly, is guided to the appropriate level.

The test questions are 30 questions divided into three types of tests:

- **Understanding audio:**

The student listens to the audio track well and then the questions that follow the audio track.

- **Reading comprehension:**

A paragraph is presented to the student and questions must be answered.

- **Linguistic structures:**

The student's understanding of the language structures is tested.

Upon completion of the test, you will be told the approximate Arabic level.

You can then search for appropriate content on the system by level.

### **2) Instructional events and corresponding cognitive processes:**

These five educational events and knowledge processes are included in the system:

- **Gaining attention:** students can concentrate via using images, videos, chats, and audios.
- **Informing learners of the objectives:** the system provides the aims of the level at the beginning of it.

- **Stimulating recall of previous learning:** questions that test the students understanding.
- **Providing learning guidance:** through practice and activates.
- **Assessing performance:** through the test (feedback).

The (Table 3.2) below shows these instructional events in the left column and the associated mental processes in the right column (Gagné, R., 1992).

No	Instructional Event	Internal Mental Process
1	Gain attention	Stimuli activate
2	Inform learners of objectives	Creates a level of expectation for learning.
3	Stimulating recall of previous learning	Retrieval and activation of short-term memory
4	Providing learning guidance	Semantic encoding for storage long-term memory
5	Assessing performance	Retrieval and reinforcement of content as final Evaluation

Table 3.1: Educational Events

### 3.5.3 Test of an experimental system:

At this phase, must make sure that platform works as required and ensure that it performs the functions and educational events, such as motivation and provide guidance to the learner and other functions. There must be a minimum level of quality, ensuring that the technical ability to deploy this system is guaranteed, and therefore the following must be done before storing the following revisions and publishing resources:

1. Identify Targeted Students: Advertising undermines any resource or path.
2. Technical Review: Ensuring the technical issues of the course in terms of the possibility of publication and the size and quality of their files ... etc.

3. Educational review: The educational rules of any educational resource must be taken into consideration.

4. Evaluation and amendment: The amendment depends on the evaluation of experts in the field and students' proposals.

### **3.5.4 Maintenance and development of the platform:**

After making sure that accessibility is guaranteed and enabled, and the dissemination and participation of this system, and the completion of the lifting of content and the construction of educational and training activities. It is necessary to continuously review the contents of the course and its activities for modernization and development, whether the updates caused by the change in the theoretical or practical part of the system, More influential teaching methods, or feedback and comments from colleagues and students themselves.

### **3.6 Different features in the platform:**

Several different features have been included in this framework so as to be able to attract users and provide the maximum possible benefit to them. The features used are as follows:

Several different features have been included in this framework so as to be able to attract users and make the most possible use of them. Included features are as follows:

Various features are included in the system. The features used are as follows:

- Allows the student to study most of the Arabic language from Arab history and cultures.

- Allows students to evaluate themselves.

- Communicate with the student by online to provide advice and guidance.

- Easy to use the platform.



### **3.7 Electronic technologies used within the platform:**

This part will introduce electronic technologies that have been used in the proposed framework for teaching the Arabic language for non-native speakers and clarify any importance in the educational process.

#### **3.7.1 Content Axis:**

##### **- Characterization:**

One of the most important features of this framework is the curriculum used in education, where the researcher used the Arabic curriculum (Between your hands) a series in the teaching of Arabic language to non-Arabic speakers. The Arabic series is (Between your hands) is one of the projects of the Arabic program for all and has recently developed in a new version to meet the needs of Arabic language learners. The series contains a comprehensive curriculum for the teaching of Arabic to non-native speakers of the student and teacher. It is a curriculum developed for students in schools, institutes, and universities to start with the student from the beginning. It was developed by the main authors, who are academic experts specialized in teaching Arabic to non-native speakers.

The researcher's use of this series is due to many characteristics and characteristics:

- The latest series in teaching Arabic to non-native speakers.
- Adopting the latest methods and methods of teaching foreign languages.
- Include many different species of standard and permanent tests, in the beginning, middle and end of each level.
- Integration of the three linguistic competencies: linguistic, communication and cultural.
- Considering the gradual supply of scientific materials.
- Adopting the unit system in building the book, with full control of the number of vocabulary and combinations in each unit.
- Sounds were processed and acoustic phenomena in a variety of new ways.

## **-Electronic Technologies Used for The Axis of Contents:**

### **1) Multimedia:**

Multimedia has made a significant change in the teaching process because of its advantages, and what it offers to learners of the language of multiple elements, the student looks through a new look at the educational process, and away from the traditional teaching methods, and directed towards the education of different sources, and very mechanisms, it focuses on. Critical Thinking, Cognitive Creativity. The researcher used Arabic series videos between your hands to many of the features and characteristics that you previously mentioned.

### **2) Language dictionaries:**

The dictionary provides information on the pronunciation, grammatical forms, and functions, their pedagogy, grammatical properties, alternative spelling, and contrasts, and provides quotations illustrating the use of the word.

- **Reasons to use the dictionary:**

The dictionary is a very important tool for anyone learning a new language. The dictionary can be used as follows:

Find the meaning of the word that a person can see or hear. Find the correct translation of the word. Check the spelling of the word. Check the plural for the name or for the past formula of the verb. Learn about other grammatical information about the word. Find a synonym or anti-word. Learn how to pronounce the word. Find examples of using the word in natural language. Check the pronunciation part of the word. Types of dictionaries.

### **Dictionary Almaany:**

Dictionary almaany site and provides education and translation service. It has two dictionaries: Arabic, English, Spanish, Portuguese, French, Turkish, Persian, Indonesian, and German (almaany, n.d.).

The researcher's use of this dictionary returns to many features and features such as:

- **Arabic Dictionary:**

The Arabic-Arabic Dictionary translates the meanings of Arabic Kamat in some famous dictionaries such as the lexicon of weeds, the lexicon of the rich, the lexicon of the modern Arabic language, the lexicon of Mokhtar al-Sahah, the glossary of terms, the lexicon of names and the dictionary of voices.

- **Synonyms and antibodies:**

Provides search service for synonyms and antibodies for different words.

- **Names' Meanings:**

Where he looks at the origin of the name and its meaning

- **Wordabula game:**

The word dictionary is a word game called wordabula, an educational challenge game to show the ability to know words in a language. This game helps to stimulate the mind to remember words or learn new words. It is synonymous with Scrabble Word and practiced by two or more players, one of the players begins to write a word on the middle of the playing board and challenges others by typing a new word using one of the word characters.



Figure (3.2): Language Dictionary

3) **External Links:** This helps in the diversity of the means of knowledge that contributes to the formation of the basic concepts of education in the process of obtaining student information from a variety of sources that have been used in this context, and including:

- **I speech:**

Arabic text reading service (ispeech, 2018).

- **Baheth:**

The site provides a search service in the most important dictionaries and references the Arabic language (baheth, n.d.).

### 3.7.2 Axis of Training and Academic Guidance:

#### - Characterization:

It is a deliberate activity that includes several systematic steps, which are mainly aimed at achieving the goals and objectives by mobilizing valuable efforts and developing the cognitive, scientific and informational aspects of the learner and his ways of thinking. The goal is to train the learner on what they have already learned from the information and skills at the end of each lesson, the researcher's use of evaluation activities is due to several reasons:

- 1-Delivering the information in an enjoyable and smooth manner
- 2 - Thrill and draw attention
- 3 - Ensure that the learner's comprehension of the lesson
- 4 - Skill in the use of educational means
- 5 - Mental development of the student

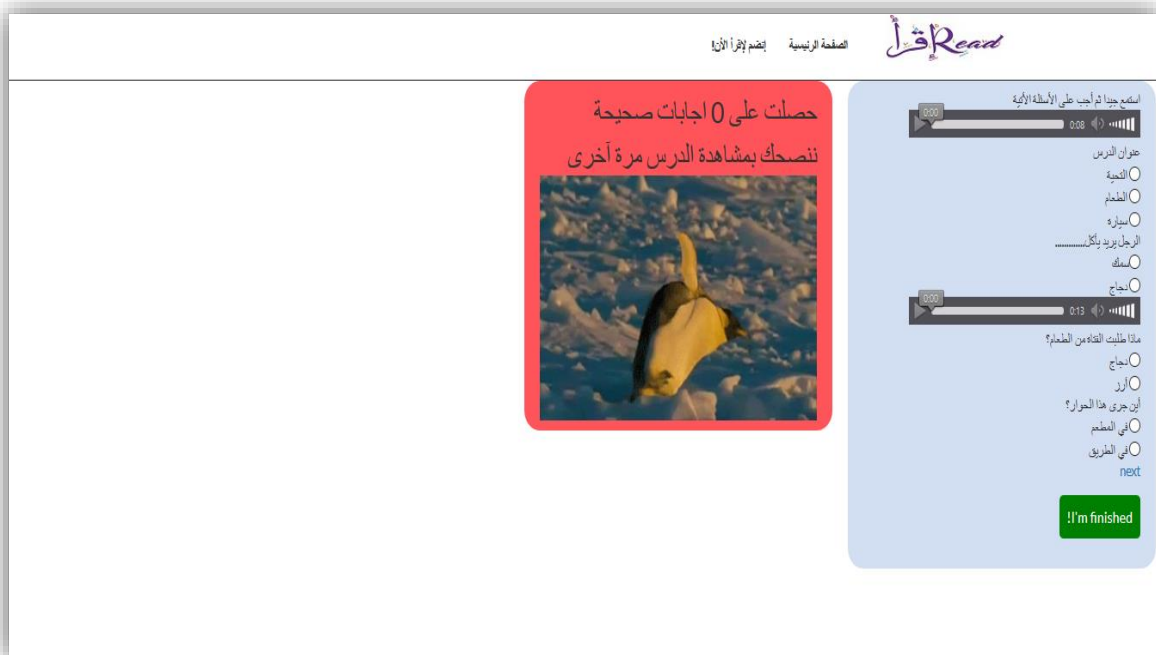


Figure (3.3): Training Activities

## **-The Electronic Technology Used in This Axis:**

### **Academic Guidance:**

The Academic Guidance System seeks to advise and assist students to successfully complete the educational process by achieving the following objectives:

- Provide the necessary support for the student during his studies to achieve the completion of the school and the completion of all the requirements within the time available.
- Follow the students academically and help them to complete their studies efficiently.
- To guide students who fail to study, guide them and take care of them and follow them to raise their scientific level and help them overcome the obstacles they face.
- Provide students with suggestions and advice to improve their academic achievement and help them overcome their academic problems.

### **3.7.3 Axis of Interactive Education:**

#### **- Characterization:**

Interactive learning can be defined as the classes or classes in which the teacher uses interaction stimuli at least once during the class to encourage students to participate in activities that allow them to interact with the material they are studying directly, and this interaction attracts and maintains students' attention. Interactive learning helps students apply what they have learned or gives them a visualization of upcoming lecture materials.

The researcher's use of interactive learning activities is due to several reasons:

- Greater interaction between students and classmates.
- They share discussions with their colleagues and learn how to prove their views using different evidence.
- Interactive methods can attract students' attention, encourage active participation of everyone in the learning process, and understand materials well.
- Interactive learning helps students apply what they have learned or gives them a visualization of upcoming lecture materials.

- **The Electronic Technology Used in This Axis:**

**Chat rooms:**

of a difficult interface in the expression without this difficulty, learning Chat rooms may enhance the success of learning the Arabic language. Learning Arabic is not complete without practice. Your academic and academic level may be high in a language and your grades are high. But when it comes to the reality you find yourself unable to create a valid sentence. In addition, you cannot go into any discussion of this language and find the appropriate words for the subject you are talking about. The main reason for this problem is that you have the time to think about the answer and analyze the question to get the right answer. And training. Chatting and speaking in Arabic may address this problem as it develops the following skills over time:

**First:** train the mind to think and extract the appropriate words at the same moment.

- Chat rules prohibit the use of any language other than Arabic in the communication even in the case will not happen.

- What should I do if I cannot express my opinion?

I'm not an accountant for what you write; just type the words that come into your mind and do not worry about their health.

Use the closest terms or change the word format for words you know.

**Second:** Chat is the best place for the non-Arab learner to apply what he learned, whether rules or terminology

In addition to refining the skill of writing and save new vocabulary and install the previous vocabulary of forgetfulness.

Chat Rooms are very important in learning languages. They offer a great opportunity for students to meet foreign people who speak Arabic as their mother tongue. This helps us to communicate linguistically and culturally with the other and provides students with simplified methods for the installation of sentences and the use of vocabulary and provides a good opportunity for students to inquire and identify on any item he wants from a source that considers Arabic as his first language.



## **Chapter Four**

### **Platform Implementation**

#### **4.1 Introduction:**

This chapter describes the proposed framework, how to implement this framework in the form of educational system screens, and then evaluation and results after using the frame.

#### **4.2 Platform Description:**

The platform of teaching Arabic to non-native speakers used to teach Arabic to non-speakers, where the student is directed to determine his level before starting the educational process and then moves to courses that are divided into three levels. lessons are video clips of the Arabic curriculum series (Between Your Hands). Each subject contains training to measure students understanding of the topic before moving on to the second topic. The user of the platform are the Learners who want to learn Arabic language and authorized to enter the platform. User functions conduct a leveling test, follow the lesson, solve the end of the lesson questions, peer discussion, share the experiment.

#### **4.3 Implementation and platform Interfaces:**

The focus at this stage is on the different steps taken during the development of the system framework by integrating the stages and educational materials into a web site that is a digital web page with a technical link on the World Wide Web.

For non-native speakers consists of several educational materials and activities that are provided through a range of multimedia to achieve specific educational goals. The following principles were also considered in the establishment of the educational site:

- Objectives: to clarify the general educational objective and then the procedural objectives and their relevance to the subject and educational content.

- Content: Use the Arabic curriculum in your hands the lessons of the relevance and achievement of the goals.
- Feedback: Appropriate support is provided to the student to enhance feedback.
- Usage: Excellence in ease of use with efficiency and efficiency in responding quickly to user feedback.
- Interface: Simplicity and lack of complexity with the inclusion of artistic aesthetic standards of colors, sounds, shapes, and tools supported  
Saves and allows interaction and reactions.
- Interaction: motivation and active participation in learning events, continuity in performance and development of learning skills.
- Navigation: Provide a flexible component of the transition between the components of the program and elements of the system without loss in the educational environment.
- Tasks: Identify clear educational tasks that achieve goals and relate to the subject.

#### **4.3.1 Stages of how to make use of the education platform:**

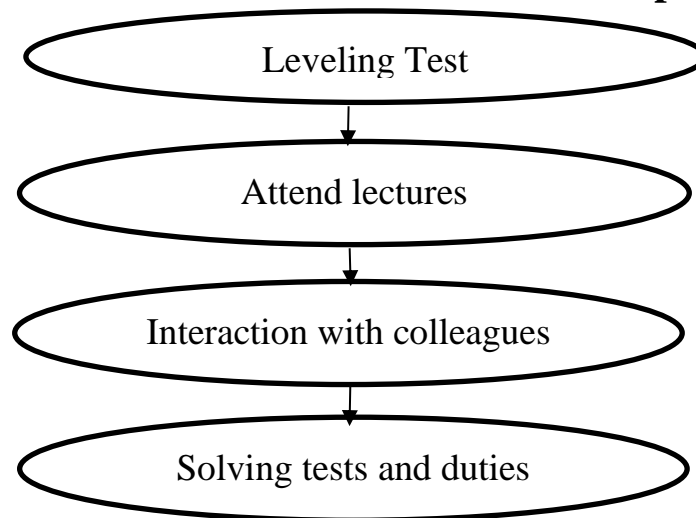


Figure 4.1 Stages of using the education platform

### 4.3.2 The Main Interface:

The main screen is a user-defined system and is responsive to most of the devices available now and contains (user registration, system information, chat room, educational levels and a number of links that the learner may need).

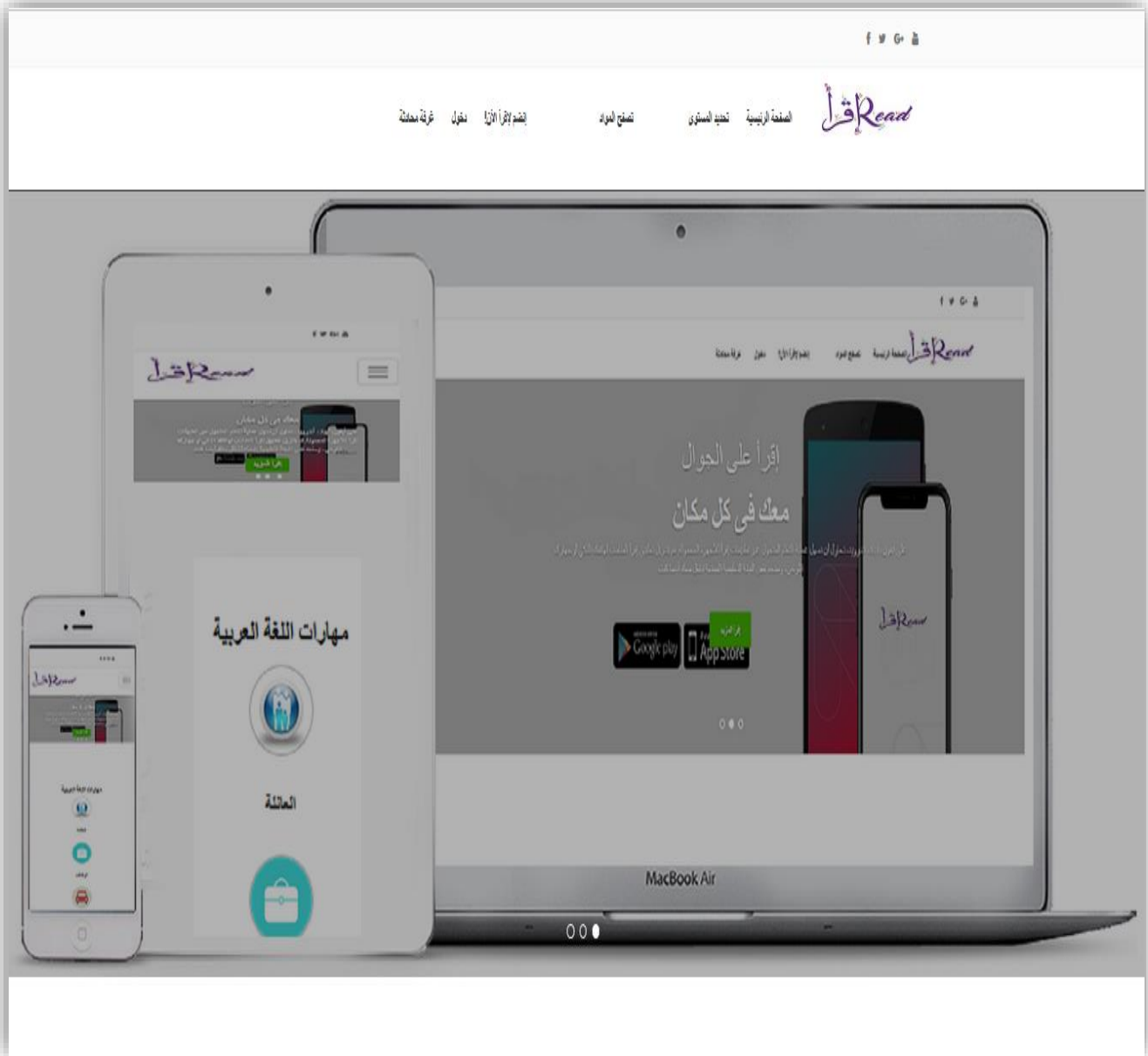


Figure (4.2): Main Interface

### 4.3.3 Sample of placement test interface:

A screen that shows how the questions are displayed and determine the system for the appropriate level.



Figure (4.3): Placement Test Interface

#### 4.3.4 Sample of educational lessons:

View the tutorials in the system as the assignment mode and activities shows at the end of each lesson to make sure that the content is understood. Arabic series for non-native speakers it is named (**Arabic between your hands**).



**Figure (4.4): Educational lessons**

#### 4.3.5 Sample of chat room:

Use the chat on site as a kind of technology used in interactive learning, it provides for anyone that register in the system and they share their knowledge and information with each other.

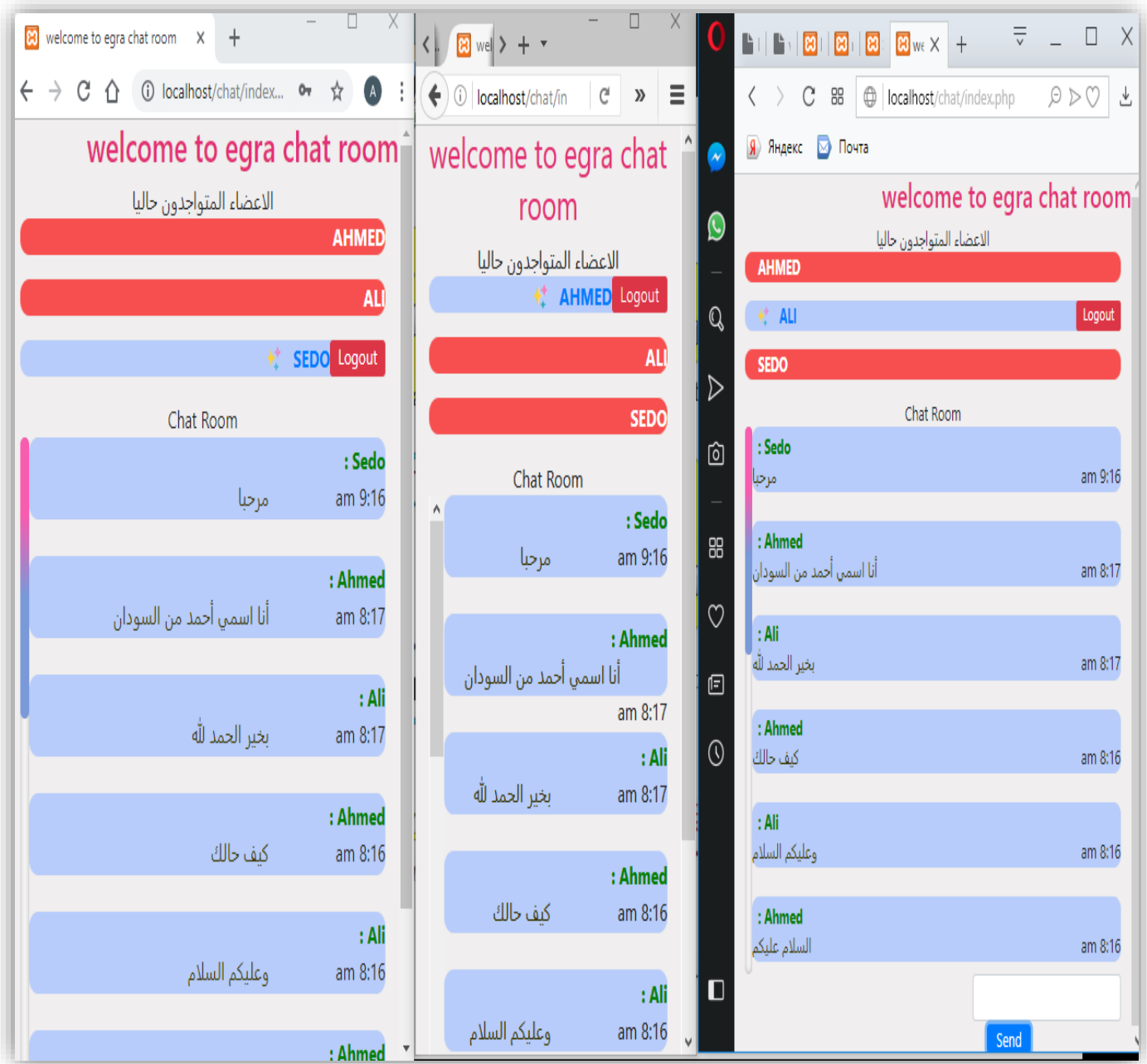


Figure (4.5): Chat Room

### 4.3.6 Sample external Links:

Use of external links in the educational platform that learners need to rich their vocabulary storage.

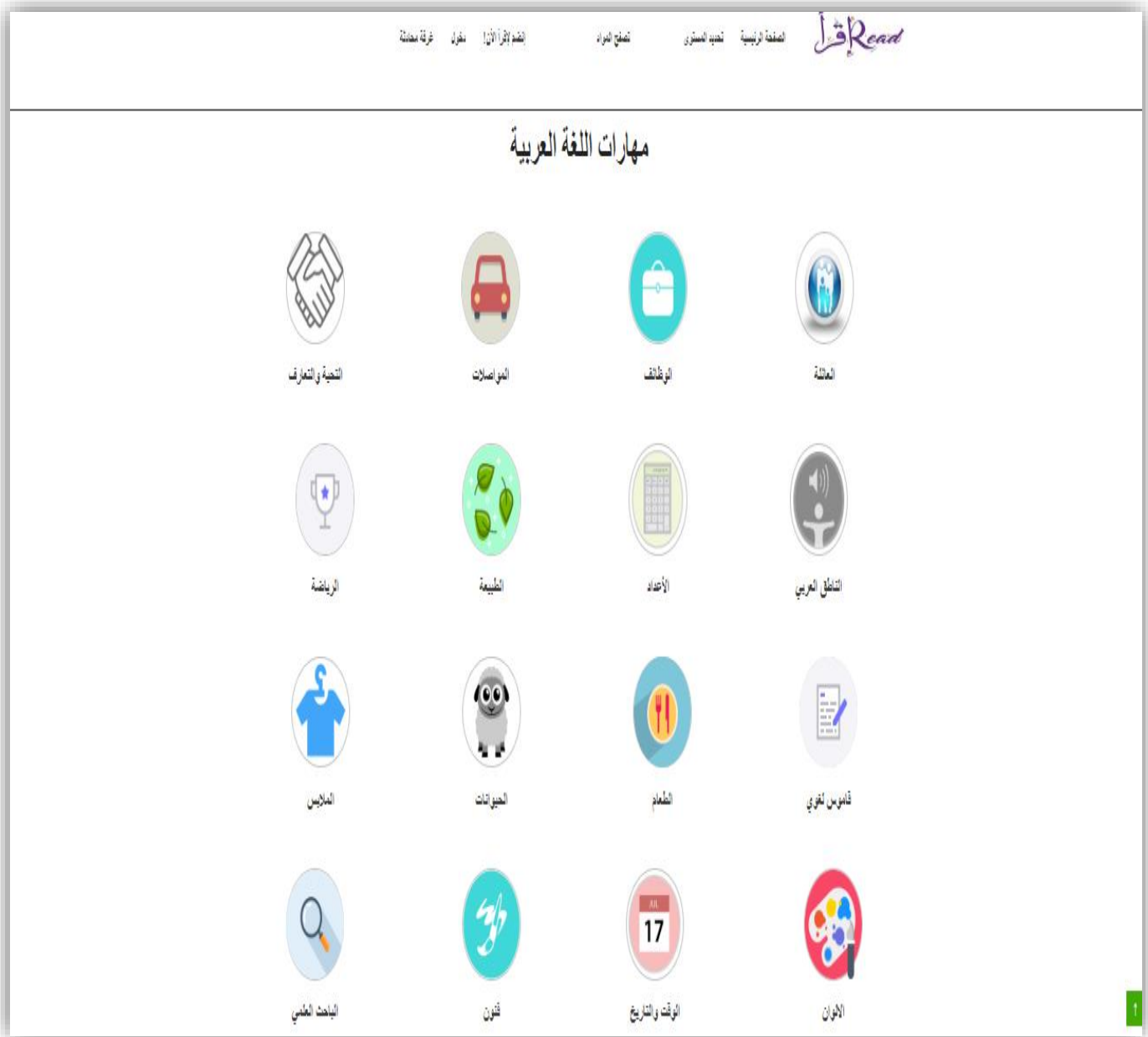
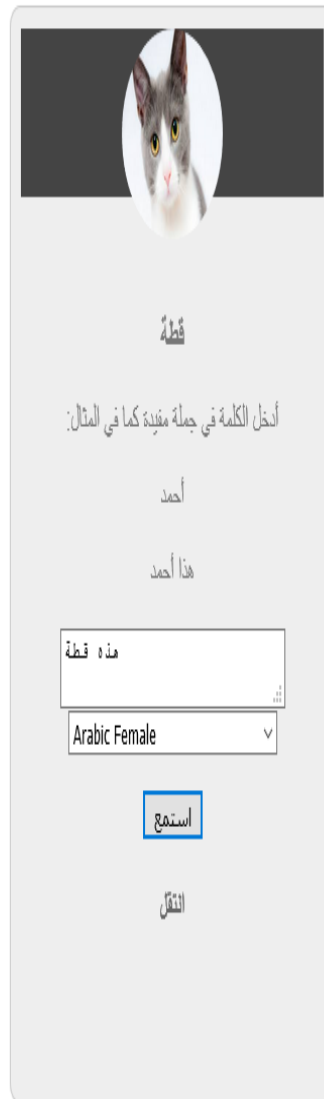


Figure (4.6): External Links

#### 4.3.7 Listen to words:

The system provides a listening feature for words and sentences that learners know the right pronunciation of the words.



قُطَّة

أدخل الكلمة في جملة مفيدة كما في المثال:

أحمد

هذا أحمد

هذه قطة

Arabic Female

استمع

التقل

**Figure (4.7): Listen to Words**



#### 4.3.8 platform Usage Guidelines:

It provides a guide on how to use the system in the learning process.



**Figure (4.8): System Usage Guidelines**

## **Chapter Five**

### **Results and Discussions**

#### **5.1 Introduction**

This chapter contains the researcher's search results and discussions

#### **5.2 Results**

After creating the platform and performing many tests, the following results appear:

- The platform allows the teachers to determine the appropriate level with the leveling test.
- The platform allows the study of different aspects of the Arabic language through external links.
- Provide guidance and guidance to the users of the platform through feedback or online communication.
- Encourages students to participate positively through interactive learning provided by the chat room and feedback.

#### **5.3 Discussions**

Rapid developments in educational resources, especially digital ones, and developments in e-courses urge Arabic speakers to keep abreast of these developments, and continuously plan to integrate modern technologies with their teaching methods.

Through this study, we believe that the proposed framework and the method of integrating educational events with modern technologies will benefit the learner and help him to improve his Arabic language in a good and free manner. It also solves

the problem of dispersion of learners who want to learn the language from non-native speakers.

In this study, the researcher presented background on the techniques used in education and the extent of their use in teaching Arabic to non-native speakers and their impact on enhancing the educational process.

The researcher found that the use of modern techniques in the teaching of the Arabic language is not the same thing that equalizes the greatness and status of this language compared to other language counterparts. So, the researcher presented a simple model of how to integrate the educational events with some modern techniques and made the site easy to use language teaching site Arabic language for non-Arabic speakers and the most important tools and techniques that help in teaching Arabic to non-native speakers.

The researcher also considered the aesthetic aspects of the form and design in that it is responsive to most of the available devices as well as simplicity in design and use of colors and the use of clear lines and guidance to facilitate the learner know how to deal with the course and a map easily able to easily jump to any section or subject.

## Chapter Six

### Conclusion and Recommendations

#### 6.1 Conclusions:

This study shows that the use of modern ICT techniques in teaching Arabic to non-native speakers solve most problems that face students. It also provides them with an educational resource that offers the material in a fun, attractiveness, and easy to use ways. The browser for most sites that teach Arabic to non-native speakers finds good efforts in the field of teaching Arabic to non-native speakers. In addition to that, it helps students to be **autonyms** learners, fit the student's level and engage them in the process of learning to the students are active not like the traditional passive learners, but still needs an organizational strategy and solid scientific foundation.

#### 6.2 Recommendations:

- 1- The development of educational curricula that inspire learners desire and pleasure and meet their need to speak and communicate in Arabic and direct communication with the present and civilization.
- 2- More attention should be given to harnessing ICTs for the benefit of the Arabic language for its obvious impact on the speaker.
- 3- Develop plans for the development of Arabic language education and its modernization from content and use of education and communication technology.
- 4- The presentation of language presentations in a fun, interesting and attractive way for learners affects the understanding of these lessons and instilling them in their minds and enabling students to self-learn.
- 5- The use of computers and the Internet to provide active learning, which depends on the use of multimedia and watches some practical applications and language practice.
- 6- More attention is paid to the development of the other skill of the Arabic language (speaking) where the researcher has the skill of listening, writing and reading.

## REFERENCES

- Alowaydhi, W.H., 2016. Evaluation of Arabic Language Learning Program for Non-Native Speakers in Saudi Electronic University According to Total Quality Standards. *Journal of Education and Practice*, 7(32), pp.74-90.
- Dweik, B. and AL-Shallakh, M., 2015. Teaching Arabic for Non-Natives in Jordanian Public Universities: Difficulties and Solutions. *American Journal of Educational Science*, 1(3), pp.52-59.
- Awang, N.A., Mohamed, M.H. and Suliman, R., 2013. Enhancing Arabic Speaking Skills among Malay Students through Group Work Activities. *International Journal of Humanities and Social Science*, 3(21), pp.212-219.
- Jamil, I. 2016. Using Technology in Teaching and Learning the Arabic Language for Non-Arabic Speakers: Proposed Structure of MOOC..., Conference Paper (TICET) .
- Aziz, A.A., Ibrahim, M.A., Shaker, M.H. and nor, A.M., 2016. Teaching Technique of Islamic Studies in Higher Learning Institutions for Non-Arabic Speakers: Experience of Faculty of Quranic and Sunnah Studies and Tamhidi Centre, Universiti Sains Islam Malaysia. *Universal Journal of Educational Research*, 4(4), pp.755-760.
- Aladdin, A., 2010. Non-muslim Malaysian learners of Arabic (NMMLAs): An investigation of their attitudes and motivation towards learning Arabic as a foreign language in multiethnic and multicultural Malaysia. *Procedia-Social and Behavioral Sciences*, 9, pp.1805-1811.
- Dweik, B.S. and Abu-Irmies, A., 2015. Learning Arabic Culture by Speakers of Other Languages. *International Journal of Education, Learning and Development*, 3(3), pp.109-119.
- Alsrhid, A.M.M., 2013. Difficulties faced by foreign students in learning Arabic language programs for non-native speakers (Evaluation Study). *learning*, 4(2).
- Khanna, P. and Basak, P.C., 2013. An OER architecture framework: need and design. *The International Review of Research in Open and Distributed Learning*, 14(1), pp.65-83.

Yi, Z. and Li-li, W., 2010, December. A Study on Plug-in-Based GIS Application Framework. In 2010 International Conference on Computational and Information Sciences (pp. 85-88). IEEE.

Kutbiddinova, R.A., and Eromasova, A., 2016. The Use of Interactive Methods in the Educational Process of the Higher Education Institution. International Journal of Environmental and Science Education, 11(14), pp.6557-6572.

Liu, B., Zheng, D., Jin, Q., Chen, L. and Yang, J., 2018. VFDB 2019: a comparative pathogenomic platform with an interactive web interface. Nucleic acids research, 47(D1), pp.D687-D692.

Ispeech, 2018. *FREE ONLINE TEXT TO SPEECH*. [Online]  
Available at: [www.ispeech.org/text.to.speech](http://www.ispeech.org/text.to.speech)

Baheth, n.d. *Arabic dictionary*. [Online]  
Available at: <http://www.baheth.info>

Almaany, n.d. [Online]  
Available at: <https://www.almaany.com/>

نايف محمود معروف، ١٩٨٥، "خصائص العربية وطرائق تدريسها"، بيروت دار النفائس، (ص ٢٤٣) .  
أحمد سالم ، ٢٠٠٤، " وسائل وتكنولوجيا التعليم"، الرياض، مكتبة الرشد ، ( ص ٣ ) .