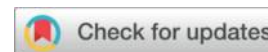




Using Computer Technology and Interactive Video in Teaching Arabic to Non-Native Speakers and Their Effectiveness in Educational Situations



Lanani Kamel ¹, Azzeddine Laanani ², Said Fahem ³

¹ Algerian Academy of the Arabic Language ,

Email: lananikameless@gmail.com

² Centre for Scientific and Technical Research on Arabic Language Development,

Email: lananilanani69@gmail.com

³ Centre for Scientific and Technical Research on Arabic Language Development Division of Didactics
– Algeria

Email: s.fahem@crstdla.dz

Received: 23/04/2026 ; Accepted: 15/08/2026 ; Published: 22/09/2026

Abstract:

The integration of technological innovations into teaching and learning processes is one of the challenges pursued by educational institutions within the educational and learning system, with all its elements and dimensions, according to specific standards. These innovations become integrated into and vitally connected with the educational process in order to improve learners' academic achievement and increase the effectiveness and efficiency of learning.

Integrating technological applications and media into teaching and learning is neither a luxury nor a secondary matter. Rather, it has become vital and inevitable because these resources provide a qualitative transformation in the restructuring and development of educational situations, resulting in significant benefits for both learners and teachers.

Technological innovations have contributed to finding innovative solutions to many problems related to teaching Arabic to non-native speakers by improving teaching efficiency and increasing its effectiveness in a manner appropriate to the requirements of the contemporary era. These solutions may be material, generated by the revolution in communications and computers, such as devices, tools, and educational materials; or intellectual, generated by the knowledge revolution and developments in educational, behavioral, and communication sciences. They are represented by various theories and strategies in the field of teaching Arabic as a second language, which have been designed and adapted to suit communicative situations. This has made them interactive, individualized, diverse, and integrated.

In this research paper, we seek to demonstrate the role of both the computer and interactive video in enhancing the success of the teaching and learning process.

Keywords: educational process, modern technologies, computer, interactive video.

Introduction:

Scholars and researchers have stated that the primary function of language is expression, that is, communication. In other words, language is a means of exchanging and transmitting ideas and information among individuals. It is also a means of stimulating the listener or reader and encouraging them to act and respond to the effect of what they hear or read.

Linguistic communication includes both spoken and written communication. Given the complexity of modern life and the abundance and diversity of technological means of communication, people have become increasingly in need of possessing linguistic communication skills, including oral skills such as listening and speaking, and written skills such as reading and writing, commonly referred to as the four skills. These skills enable individuals to persuade and be persuaded and to achieve understanding and mutual comprehension. Consequently, attention should be paid to linguistic communication skills and extensive training should be provided in them.

Employing technology in teaching Arabic to non-native speakers has become necessary and inevitable in order to address the technological challenges of the contemporary era. It contributes to updating methods of teaching Arabic and learning activities and to achieving the intended educational objectives.

Research Problem:

In recent years, modern technology has provided means and tools that have played a major role in developing teaching and learning methods. These means have also provided opportunities to improve teaching methods in ways that create an effective educational environment capable of stimulating students' interest, motivating them, and addressing individual differences among them effectively.

As the technological revolution continued, numerous technological tools emerged, foremost among them the computer, which has now been largely replaced by mobile smart devices. Linguists were not isolated from developments in modern technologies because of their profound impact on everyday human life. They therefore conducted research and experimentation to identify the educational potential of these modern technological tools and determine how they could be adapted to increase the effectiveness of education.

One of the most important examples of technological innovations that can be employed communicatively in teaching Arabic to non-native speakers is multimedia technology, including texts, images, graphics, and video clips. These can be used to present specific educational content interactively and comprehensively through computers and the Internet.

There are also many other devices considered technological innovations, such as data projectors, modern language laboratories, electronic boards, and audiovisual satellite channels. The degree to which teachers benefit from these modern technologies is an important criterion for evaluating the effectiveness of the educational technology system.

Based on the foregoing, the following research question can be formulated:

What is the impact of using modern technologies and digital media in teaching Arabic to non-native speakers, and how effective are they in educational situations?

This main problem leads to a number of subsidiary questions, including:

What is meant by technologies and electronic media, and how effective are they in educational situations?

What is the effectiveness of electronic and digital media in teaching Arabic to non-native speakers?

Have they achieved the intended objectives?

What factors contribute to the success of this form of education?

What are its requirements, means, and current situation in the Arab world?

What are its challenges, achievements, and obstacles?

What are the future prospects for teaching Arabic to non-native speakers in Arab countries?

Importance and Objectives of the Study:

With the emergence of the information age, modern communication technologies and means underwent significant development. The third millennium witnessed remarkable advances in this field. Education was not isolated from this communication revolution; these technologies have been employed in various teaching and learning processes, particularly in acquiring skills and information.

It has become easier to use these modern media and technologies and adapt them to serve the educational process. Modern mechanisms, including computers and various electronic media involving sound, images, and graphics, can be employed to deliver information to learners in the shortest possible time and with the least possible effort.

From this perspective, the importance of this study lies in its contribution to enhancing teachers' instructional competence and improving academic achievement among learners of Arabic as a non-native language.

The importance of the study can be summarized in two main points:

The results of this study may be utilized by specialists and researchers in the field of teaching Arabic to non-native speakers in order to generalize this form of education across educational centers.

Improving this form of education by benefiting from the outcomes of communication technology, modern technologies, electronic media, computers, and their applications.

The present study aims to:

Identify the advantages of employing electronic media and modern technologies in teaching Arabic to non-native speakers.

Examine some modern technologies and the extent to which they can be adapted to improve the educational process for the target group.

Attempt to reach solutions and proposals that contribute to improving the teaching and learning process and overcoming the obstacles it faces.

Research Methodology:

Scientific research requires the adoption of a scientific method. A method consists of a set of rules and procedures employed by the researcher to reach accurate scientific results. The choice of method in any study is related to the problem formulated at the core of the research.

Since this research examines the impact of using modern electronic and digital technologies and media in teaching Arabic to non-native speakers and their effectiveness in educational situations, the study adopts the descriptive-analytical method. This method is appropriate for this type of research because it involves collecting facts and information related to the subject under study, analyzing, criticizing, and discussing them in order to reach generalizations and conclusions.

Definition of Terms and Concepts:

Defining terminology is an important step for researchers in their studies because it establishes the specific parameters of each concept and clarifies the conceptual boundaries of terms.

Research Terms and Operational Definitions Employment/Utilization:

It means using something for the purpose of improvement and development. Operationally, it refers to the learner's effective use of educational technologies and their application in different educational situations. The degree to which teachers benefit from modern technologies is an important criterion for assessing the adequacy of the educational technology system.

It is important to distinguish between using technologies and employing technologies. Employment is broader than simple use because it aims to improve the educational process and represents effective and productive use. Use, on the other hand, merely refers to resorting to and interacting with modern technologies. **(Sayyid Fath al-Bab, 1990, p 7)**

Modern Technologies:

The term “technology,” or “technologies” as preferred by some specialists, can briefly be defined as the science of application. It also refers to a specific scientific method used for a particular purpose, such as computer technology and communication technology.

Educational Technologies:

An educational technology system consists of a set of interconnected components, including devices, educational materials, programs, human resources, evaluation strategies, design, and production. These components influence one another and work together to increase the effectiveness and efficiency of various educational situations and to solve one or more educational problems. **(Al-Sawaf, 1987, pp. 29–5)**

Educational technology has also been defined as a systematic approach to designing, implementing, and evaluating the educational process according to specific objectives derived from research findings in education and human communication, using human and non-human resources to increase educational effectiveness. **(Al-Shumayri, 2013, p. 135)**

Based on these definitions, the concept of technology in Arabic language education can operationally be defined as the management of Arabic language teaching and learning through educational software and active electronic curricula in order to provide learners with Arabic language skills, achieve constructive linguistic communication, respond to contemporary changes, and promote and disseminate the Arabic language.

Technology is therefore not merely the use of devices and machines as a luxury or secondary matter. Rather, it is a way of thinking, a method of work, and an approach to problem solving based on systematic planning and an organized scientific method consisting of numerous interconnected and interacting elements designed to achieve predetermined objectives.

Teaching Arabic to Non-Native Speakers: This refers to the efforts made to teach foreign learners the Arabic language as a means of communication, enabling them to acquire oral communication skills such as listening and conversation and written skills such as reading and writing, commonly known as the four language skills.

The expression “**non-native speakers**” refers to language learners for whom Arabic may be either a second or a foreign language. (Ilgha, 2009, p. 161)

Teaching Arabic to Non-Native Speakers:

Necessity and Requirements The last decade has witnessed remarkable growth in the field of teaching and learning Arabic for non-native speakers. This interest has been demonstrated through the organization of conferences and seminars, the establishment of specialized departments and educational institutes, and the discussion of numerous issues related to teaching Arabic to non-native speakers, including curricula, teaching methods, Arabic teacher training, the use of technologies, modern theories in teaching foreigners, and teaching Arabic for specific purposes. (Abu Amsha, 2015, p. 13)

1. Research into modern technologies and teaching methods appears to be an effective means of overcoming many of the difficulties encountered in teaching Arabic to non-native speakers. Many specialists and educators have therefore called for greater attention to teaching Arabic through modern methods and approaches.

Teaching Arabic to non-native speakers should have a clear and specific purpose: teaching Arabic as the language of Islam. The starting point is planning, selecting curricula, and choosing teaching methods in order to achieve that purpose. (Al-Rajhi, 1995, p. 119)

Planning should be based on official decisions made by the competent authorities that possess decision-making power. Once effective higher-level decisions are available, planning should be scientific and should clearly identify objectives, means, and purposes.

Regarding content selection, the learner has a particular background, civilization, culture, first language, and objectives for learning Arabic. Therefore, it is essential that the content be consistent with the objectives and purposes established.

This is one of the most important concerns and obstacles facing designers of Arabic language programs for non-native speakers. They continually seek to develop proposals, visions, and projects for

establishing an integrated and unified curriculum and program for teaching Arabic in Arab countries while benefiting from leading foreign experiences in this field.

2. **Rationale for Employing Educational and Technological Media in Teaching Arabic to Non-Native Speakers:** Means and Requirements Technological development has encouraged researchers to seek modern educational methods and approaches that enable learners to adapt to current changes and developments, replacing traditional methods whose effectiveness and efficiency have declined with the technological revolution.

The main benefits that teachers derive from employing technologies and electronic media in the teaching process can be summarized as follows:

They stimulate students' motivation and enthusiasm for learning through the use of sound and images, facilitating psychosocial interaction in the classroom.

Computers provide rapid responses to activities and instructions, resulting in immediate reinforcement and smooth progression through the stages of a lesson.

They allow teachers to extend the intervals between monitoring students, giving them sufficient time to carry out other guidance activities.

Educational technologies have encouraged specialists in teaching Arabic to non-native speakers to use educational technology to explain sentences and new vocabulary. As a result, linguistic learning has become more engaging and dynamic. Language is no longer merely a collection of obscure rules and symbols; rather, it becomes a living entity that enters into all areas of scientific and intellectual life.

These technologies can be classified according to the sense or senses they address into visual, auditory, and audiovisual technologies.

Visual technologies include photographs, various drawings, and educational charts such as pocket and felt boards, maps, data projectors, and slides.

Auditory technologies include audio recordings such as language laboratories, tape recordings, and audio discs.

Audiovisual technologies include technologies that rely on both sight and hearing, such as television programs, interactive computer programs, and interactive video programs.

Teachers of Arabic to non-native speakers should select the technologies that help clarify the language lesson. Their choices should also be based on clear scientific principles, including defining the behavioral objectives of the language lesson and determining the extent to which the medium contributes to achieving those objectives. **(Ali Al-Qasimi, 1991, p. 7)**

Among the auditory technologies useful for teaching language elements are those used to teach sounds, images, drawings, and the board. The most important technologies used in listening skills include audio recordings and language games.

Speaking and pronunciation skills include, in addition to listening technologies, activity programs such as language games, pictures, slides, and films. These technologies support speaking activities involving simulation, repetition, and processing.

For writing skills, teachers rely on the board and the illuminated board, which are among the basic tools for acquiring writing skills. **(Sini, 2009, p. 172)**

The aforementioned media can be employed with a focus on the four skills. The use of these technologies in the educational process can be summarized in four areas: planning, educational process management, assessment and examinations, and teaching.

In this study, we focus on two technologies: interactive video and computers.

2.1 Interactive Video enables the transmission of live images and sound from one location to several locations separated by distances in order to transmit information related to lessons at all educational levels, as well as lectures, seminars, conferences, and other activities.

It provides language learners, particularly non-Arabic speakers, with information they need. Several studies conducted in the United States have reported that learners may remember 10% of what they read, 20% of what they hear, 30% of what they see, 50% of what they hear and see simultaneously, 70% of what they say, and 90% of what they do. (Mandour, 2007, p. 58)

This educational medium facilitates learning and increases its effectiveness because it engages both hearing and sight in the learning process, as demonstrated by studies.

Interactive video combines computer technology with video, whether video cassette or disc-based systems. It enables learners to interact with a program contained on a tape or disc in a way that allows them to learn ideas and acquire new experiences within an educational situation.

Interactive video, in its current form, is an effective, dynamic, and efficient medium. It does not require the learner to possess extensive technical knowledge; familiarity with using a keyboard is sufficient to enable interaction with the information presented by the program, curriculum, or course. **(Ali, 2005, pp. 18–20)**

Interactive video is one of the innovative and creative educational systems that have emerged recently. It provides a qualitative transformation in the creation and development of educational situations by offering opportunities for interaction between learners and educational materials.

Teachers living in the cyberspace environment therefore need to be interested in and proficient in interactive video technologies and their applications in different educational situations.

Interactive video is primarily based on the interactive characteristics of computers and their applications. Sound and images are displayed through a screen that forms part of an integrated unit consisting of a computer, data-input devices, and storage facilities.

Following this brief presentation, interactive video can be defined as a video program divided into small segments consisting of moving sequences, combining video technology with computer technology. Lessons are recorded on video and connected to a computer that controls the movement and use of the video.

2.2 Computer Technology and Its Applications The computer represents the culmination of modern technologies. It plays an important role in an era in which technology has become a prominent feature of communicative, cognitive, and educational life.

It has therefore become inevitable for computers and their applications to be integrated into education. Computers address the four language skills: listening, conversation, writing, and reading. They develop learners' exploratory and experimental abilities, stimulate their thinking, and satisfy their interests through engaging programs that attract learners' attention.

They also develop self-learning skills and allow learners to identify and correct their own mistakes, thereby increasing self-confidence. **(Boukhatem, 2014, p. 8–7)**

Computer Applications in Teaching Arabic Computers can be used to teach Arabic in the following areas:

Reading several aspects of reading can be developed through computers:

Comprehension: Some software and applications are designed so that a text appears on the screen, followed by objective questions such as fill-in-the-blank, true or false, multiple choices, or identifying the grammatical category of a particular word, such as noun, verb, or particle.

Text Processing: The program presents a text from which certain words have been removed. The learner is asked to enter the appropriate words in each location or select the appropriate word from a list displayed on the screen.

Reading Speed: Learners' speed-reading skills can be developed while avoiding word-by-word reading through special software using a timing factor. The text appears on the screen for a specific period, and then disappears, and questions appear for the learner to answer.

Writing Word-processing programs can be used for writing. They give learners freedom to modify texts through immediate correction, spelling checking, translation, different fonts and sizes, saving pages, and editing or replacing words.

Of particular importance is writing letters in their different forms. Applications can display a letter on the screen, after which the learner imitates it on paper or writes it directly on the screen using a light pen or a special drawing tablet connected to the computer.

One of the most recent technologies used in education is the interactive whiteboard, a special type of sensitive interactive whiteboard operated through touch or, in some cases, a pen. Writing on it is performed electronically.

Listening Listening is the process through which a person becomes aware of and pays attention to sounds or speech patterns that they hear and recognize, followed by comprehension of what has been heard.

There are several ways in which computers can develop listening skills.

Sound Recognition: Distinguishing between sounds and the articulation points of letters is essential for correct pronunciation and effective listening comprehension. Some programs allow learners to listen to words and then identify the word they heard through multiple-choice questions. These applications also allow learners to listen repeatedly.

Conversation Some programs are used to improve learners' speaking skills. They give learners the opportunity to listen to conversations between several people about different topics. Through these conversations, learners learn how to ask questions in specific situations and how to respond when questions are addressed to them. (Nabhan, 2008, pp. 54–55)

Thus, applying computer technology to the teaching and learning of Arabic by non-native speakers helps learners develop their linguistic skills. It constitutes a supportive element and a flexible tool in the hands of teachers and learners, creating an active, interactive, and collaborative educational environment.

There are other electronic technologies and media, such as the Internet, but this study focuses on interactive video and computer technology and its applications because they are two important educational means that play an effective role in the success of the teaching and learning process for non-Arabic speakers.

The quality of any educational system depends on the competence of its teachers. Teachers therefore need to renew and develop their practices and remain continuously informed about new developments in their field. They must understand modern methods and technologies in order to transfer advanced experiences to their students effectively and positively.

They should also develop their ability to employ learning and teaching technologies and educational software, use other electronic devices, and continuously adapt their methods and teaching skills to the spirit of the contemporary era in order to contribute effectively to achieving the desired educational objectives. **(Ridwan, 2008, pp. 175–176)**

3. Obstacles to Using Technologies and Electronic Media in Teaching Arabic to Non-Native Speakers Despite the considerable efforts made in teaching and learning Arabic, the use of technological resources in this field has not gone beyond employing educational and communication technologies as auxiliary or supportive tools.

These efforts have not yet sufficiently reached the stage of designing educational software and multimedia electronic curricula.

The use of modern technologies in the educational process faces numerous difficulties and challenges depending on the economic and cultural level of societies. Al-Zahrani summarized these challenges as follows:

A shortage of specialists in educational computing within the field of teaching Arabic to non-native speakers, as well as insufficient awareness of integrating technology into education.

A shortage of high-quality and appropriate electronic programs due to the difficulty of designing them. Computers do not provide direct opportunities for teaching manual skills and conducting scientific experiments; they are limited to simulation.

The belief that computer-based or computer-assisted education may greatly hinder or restrict learners' innovation and creativity, reduce the role and activity of teachers, and result in insufficient effectiveness.

(Al-Zahrani, 2009, p. 38)

Conclusion:

The study has led to a number of conclusions, which can be summarized as follows:

The use of educational computers in teaching Arabic to non-native speakers makes computers flexible tools in the hands of teachers and learners and creates an active, interactive, more engaging, and attractive educational environment.

This paper examined the use of modern technologies in teaching Arabic to non-native speakers, focusing on computer technology and its applications as well as interactive video, since they are two important educational means that play an effective role in the success of the teaching and learning process. They promote interaction between teachers and learners and help move beyond rote learning and the dry presentation of ideas and information.

Following analysis and study, the research identified numerous technological challenges facing the teaching of Arabic to non-native speakers. These include teachers' need for training in the use of computers and their applications in teaching Arabic according to the communicative approach; training in designing and preparing electronic educational units through the Internet; making effective use of resources and tools available online; training in preparing and integrating multimedia elements into presentation programs; and the need to employ technological innovations such as electronic whiteboards, interactive educational videos, and other available media.

Based on the foregoing, the study proposes a number of recommendations:

Establishing a center for training Arabic teachers who teach non-native speakers, enabling them to learn how to make use of modern technologies and electronic media and employ them in the educational process. Such a project could be adopted by the Association of Arab Universities or other official scientific bodies.

Promoting a culture of comprehensive quality in departments and institutes specializing in teaching Arabic to non-native speakers or teaching Arabic for specific purposes.

Establishing websites dedicated to teaching Arabic to non-native speakers based on linguistic, applied linguistic, and language-teaching theories and in accordance with technical, scientific, artistic, and educational standards.

Introducing fundamental changes and modifications to the design of educational curricula and programs and adapting them to technological innovations and electronic educational media.

Adopting modern teaching methods based on learner activity and providing learners with opportunities for self-learning according to their abilities, needs, interests, and inclinations.

Preparing and equipping the educational environment with modern communication technologies, including educational computers and their accessories, networks and multimedia, research tools, data projectors, modern language laboratories, and the Internet, in order to achieve linguistic communication objectives and create an interactive, electronic, and virtual educational environment.

References:

- Ahmed Abdullah Ali (2005). Distance Education. Cairo: Dar Al-Kitab Al-Jadid.
- Awsaf Ali Deeb (2012). "The Reality of Employing Educational Technologies in the Master's Program for Teaching Arabic to Non-Native Speakers." Damascus University Journal, Vol. 28, No. 2, Syria.
- Ibrahim Brahimi & Asmaa Lashhab (2014). "Obstacles to Applying E-Learning at the Secondary Education Level." Second International Conference on Ergonomics Applications in Developing Countries, 28–29 May 2014, Algeria.
- Khaled Hussein Abu Amsa (2015). Teaching Arabic to Non-Native Speakers in Light of Applied Linguistics. 1st ed. Jordan: Dar Kunuz Al-Ma'rifa.
- Daoud Abdelkader Ilgha (2009). "Teaching Arabic to Non-Native Speakers: Foundations and Standards." Arabic for Non-Native Speakers Journal, No. 8, Sudan.
- Abduh Al-Rajhi (1995). Applied Linguistics and Teaching Arabic. Egypt: University Knowledge House.
- Ali Al-Qasimi & Muhammad Ali Al-Sayyid (1991). Educational Technologies in Teaching Arabic to Non-Native Speakers. Morocco: Islamic Educational, Scientific and Cultural Organization (ISESCO).
- Ghalib Ridwan Muhammad Saeed & Alam Tawfiq Ali (2008). "Professional Development of Faculty Members: An Approach to Total Quality in University Education." Arab Journal for Quality Assurance in University Education, Vol. 1, No. 1, Jordan.

- Samir Abdulrahman Al-Shumayri (2013). "Using Modern Technology in Teaching, Learning, Disseminating Arabic and Its Impact on Civilizational Communication." *Al-Nasser University Journal*, No. 2, Yemen, December.
- Sayyid Fath Al-Bab Abdul Halim (1990). *Employing Educational Technology*. 1st ed. Cairo: Dar Al-Ma'arif.
- Saber bin Jamaan Al-Zahrani (2009). *The Availability of Computer-Use Competencies among Secondary-School Mathematics Teachers*. Master's thesis, Umm Al-Qura University, Saudi Arabia.
- Mahmoud Ismail Sini (2009). "A Study of Methods of Teaching Foreign Languages." Paper presented at a seminar entitled *Teaching Arabic to Non-Native Speakers*, Medina, Saudi Arabia.
- Nadhira Boukhatem (2014). *The Role of Technology in Teaching Arabic to Non-Native Speakers*. Faculty of Arts and Languages, University of El Tarf, Algeria.
- Mandour Abdel Salam Fathallah (1428 AH). *Educational Media and Technologies*. 2nd ed. Riyadh: Al-Rushd Library.
- Nabhan Yahya Muhammad (2008). *Using Computers in Education*. Amman: Al-Yazouri Scientific Publishing and Distribution House.
- Nadhira Boukhatem. *The Role of Technology in Teaching Arabic to Non-Native Speakers*. Faculty of Arts and Languages, University of El Tarf, Algeria, 2014.