RESEARCH ARTICLE

The Impact of Using Smart Applications and Tools on Teaching Arabic Language

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Doi Serial https://doi.org/10.56334/sei/8.6.36

Keywords Effectiveness, Applications, Educational Technology, Arabic Language.

Abstract

The digital revolution has greatly advanced in different fields, particularly in information and communication technology. It has played a crucial role in serving humanity, improving its capabilities, and facilitating its functions. We believe in the significance of keeping pace with technological advancements, and technological innovation is a key factor in empowering nations as much as their scientific progress. Arabic language has not been isolated from this influence, as efforts are made to implement modern technology and demonstrate its effectiveness in elevating Arabic to the level of foreign languages in usage and exchange. This research paper aims at exploring the digitization of the Arabic language and its contribution to the advancement of Arabic, representing national sovereignty and serving as a symbol of identity.

Citation

Aounallah Kh., Djekal Dj., Hamidi B. (2025). The Impact of Using Smart Applications and Tools on Teaching Arabic Language. *Science, Education and Innovations in the Context of Modern Problems*, 8(6), 341-348; doi:10.56352/sei/8.6.36.https://imcra-az.org/archive/364-science-education-and-innovations-in-the-context-of-modern-problems-issue-6-volviii-2025.html

Received: 01.12.2024 | Accepted: 27.04.2025 | Published: 15.05.2025 (available online)

Introduction

Arabic is among the most spoken Semitic languages and one of the most widespread languages globally. It serves as a carrier for Arab culture and Islamic civilization. Throughout history, scholars have recognized its significance and dedicated their efforts to refining, enriching and preserving it from the vagaries of time. No language has received the same level of attention and monumental efforts as Arabic in meeting the requirements of the era. However, the changes brought about by scientific and technological developments have had a profound effect on different levels, introducing a new phenomenon of the enormous amount of information transmitted through communication and networking devices. The educational field, in general, and education, in particular, have not been immune to this progress, bringing a new and effective source of learning for all categories at different levels.

Education through modern technology has emerged as a fundamental aspect of the contemporary era. It has contributed to changing many concepts, relationships, and patterns of classroom and extracurricular interactions. It has become essential to accompany the trends towards the knowledge economy, aiming to vitalize learning based on discovery and analysis. In the age of information technology, we need a comprehensive linguistic renaissance that keeps pace with this era and harnesses information technology for the benefit of the Arabic language. Following dry methods in teaching the Arabic language leads the alienation of youth. Thus, it is imperative to update education by developing its curricula, methods, and approaches to align with modernity while preserving the authenticity of the language and heritage.

Many studies have indicated the effectiveness of technology in the process of teaching and learning. Educational technology introduces a modern revolution in teaching methods and techniques, from employing electronic presentation tools to deliver lessons in traditional classrooms to using multimedia in classroom teaching and self-learning processes. This entails establishing smart schools and virtual classrooms that enable students to attend and interact with lectures and global seminars relied on the internet and interactive video technologies. Its proven effectiveness in teaching Arabic is a means of preserving the language and fulfilling more efficient learning, offering evidence that the language is capable of keeping pace with the rapid developments of this era.

Problem Statement:

The observer of the remarkable development that languages witness in contemporary technological fields, especially information technology, stands perplexed amidst the vast amount of data and information that one unable to keep up with without being equipped with the specific procedural mechanisms of each cognitive field. the Arabic language field has not been immune to this influence, which has impacted all levels, particularly the forms of Arabic digital text, its linguistic structure, composition, dimensions, and concepts. **The electronic publishing of linguistic, literary, and scientific texts in Arabic on the internet or in Arabic search engines is on the rise. However, Arabic currently does not match foreign languages in terms of circulation and interaction**. Hence, we pose questions hoping that the answer lies in expanding the topic:

- How do technological applications contribute to and enhance the didactics of the Arabic language?
- Does the use of technological media in Arabic language activities lead to the acquisition of its units and methodologies?
- Does the adoption of these modern technologies and the effectiveness of their implementation contribute to improving the learning and teaching process of the Arabic language?

All these questions will emphasize the significance of modern technologies and applications today in teaching the Arabic language, benefiting from the digital revolution in the informational field. Furthermore, the study attempts to evaluate the

effectiveness of these technologies by integrating digital and communicative technological means in different forms in teaching the Arabic language. It seeks to identify their suitability for the educational-learning process imposed by the current technological and educational reality and how this reality can contribute to its advancement. Focusing on the educational field and researching what the Arabic language should be from a didactic perspective is a crucial factor in its advancement and a key element in fostering the widespread use of the Arabic language.

1. Educational Technological Applications:

Technology in education is no longer just a luxury or a complement to classroom components, as it employed to be regarded merely instructional aids. Its significance has shifted to designing teaching situations that involve drawing up plans to use these tools correctly. Technology products have become necessary in the current era, with the possibility of being integrated into the educational process. They have evolved into a feature of suitable lessons, with teachers rushing to enrich their lessons utilizing them. Accordingly, we must delve into some terminologies with direct definitions to clarify our objective. This is the nature of every research endeavor.

1.1. Technology Concept:

The word "technology" is derived from the Greek word "techno," meaning art or skill, and the Latin word "texere," indicating construction or weaving, while the word "logos" refers to science or study. Therefore, "technologies" demonstrates the science of skills or arts, which is the logical study of skills to perform a specific function[1].

Terminologically, it indicates the systematic implementation of scientific or organized knowledge for practical purposes. One of the important definitions is in **Donald Bell's** statement: "Technology is the effective organization of human experience through logical means of high efficiency, and directing the latent forces in the surrounding environment to benefit from them for material gain." Based on this, the method alone is not technological, nor is the machine alone technological. **Gustafson** shares this view, regarding technology as a process and its outcomes together, employed in this sense when referring to operations and their outcomes, such as computer technologies[2].

1.2. Educational Technology:

The term "educational technology" is originally an Arabic term, equivalent to " Tiqniyat al-taaleem " teaching techniques in Arabic. Its appearance started in the latter half of the twentieth century, keeping pace with the rampant technological revolution including all human life systems on Earth, entailing educational systems[3]. There are numerous definitions for educational technology due to the various academic perspectives. Among these definitions are the following:

Firstly, it is "the media invented during the communications revolution, and that can be employed for educational purposes alongside the teacher, textbooks, and chalkboard (whiteboard)." **Secondly**, it is "a systematic method for designing, applying, and assessing the overall process of learning and teaching through specific objectives based on research in the fields of human learning and communications, in addition to using human and non-human resources to fulfill more effective education.[4]" Additionally, **Witch** defines it as "a term that comes from human and non-human resources, and is utilized as a systematic method for designing the teaching and learning process, evaluating it as a whole, and linking between the human resources of curriculum specialists, instructional design, evaluation, and methods on the one hand, and non-human educational resources such as information networks, printing machines, audio-visual aids, computers, and others on the other hand.[5]"

From these definitions, **educational technology** is both a theory and a practice, i.e., an integrated system that encompasses humans, machines, ideas, and work methods, all working together within a unified framework to fulfill specific objectives.

1.3. Forms of Technological Applications:

Educational technology seeks to improve educational efficiency and fulfill the pinnacle of educational communication within or outside the classroom. Therefore, it was important for Arabic language educational technology to employ as many technological educational tools as possible to effectively implement modern and advanced techniques that align with global developments. Among these applications is introducing pre-prepared technological programs into the educational system, where specialized teachers in different Arabic language disciplines apply them according to a scientific plan. Digital educational units are one of the new components of computer-based learning, as they can be employed multiple times and in different situations to ensure repetition and renewal simultaneously. Among the most essential technological applications are:

- Visual Technology (Video): This includes the visual competencies individuals can develop through vision, employing other sensory experiences simultaneously. Developing these competencies is significant for natural human education, as they enable visually learning individuals to distinguish and interpret visual movements, objects, and natural and manufactured symbols faced in their environment. The term "visual education" was coined for the devices utilized then, confirming the use of non-verbal materials in education to respond to the dominance of verbal materials such as books and lectures[6]. The use of video in education varies and includes both direct and indirect interaction. It involves static forms like slides, dynamic forms like films and video tapes, and real-time produced forms that accompany audio conferences via one-way or two-way video with accompanying sound[7].

- Audio-Based Technology: It is divided into two types. The first is interactive, such as audio conferences and shortwave radio. The second type includes static audio tools, such as audio tapes and videos.

- Computers and Their Networks: Computer-assisted instruction, pioneered by Atkinson, Wilson, and Suppes, appeared as a program in educational journals. It allows for the presentation and storage of information, offering learners with opportunities to discover solutions to problems or arrive at conclusions on their own. Computers in today's knowledge-rich world call for personalized education, selecting the most suitable methods, and employing the most voluntary tools to apply self-directed learning strategies. Hence, interaction occurs between individual students and the computer programs[8], which serve as auditory and visual aids through different methods such as instructional guidance, practice and training, and simulation[9].

2. Educational Reality of the Arabic Language:

The educational process of the Arabic language has recently faced several challenges and difficulties hindering the activation of Arabic language didactics in different educational stages. One of the most important challenges is the weakness that has impacted both the teaching and learning processes. Hence, many aspects are associated with teaching and learning, entailing teaching methods, learning methodologies and mechanisms, communication strategies, curriculum contents, educational tools, and technologies. Essentially, the educational-learning process is confined within a set of features that could be considered causes of its educational decline. Among these features are:

- Technical Education of the Arabic Language: What is noticeable in the didactics of the Arabic language, with the majority of teachers, is the technical application lacking the essence of the language. Teachers seek to conduct activities technically, which is apparent in the language didactics for practical and programmatic reasons. This results in passive learning; teaching does not inspire learners or encourage them to improve their learning, as its nature is purely technical.

- Curricula and Teaching Materials: The foundation in constructing educational curricula is ease and clarity. However, readers of the curricula of Arabic language didactics may need clarification and the inclusion of unfamiliar terms for Arabic language teachers. This may lead to their aversion to reading them or, as they are derived from a various

environment, their distance from the curriculum, forcing them into random presentations. This lack of attention to the visual aspects of the learner, which is a crucial aspect affecting curriculum development, necessitates that curriculum planners consider the reality of the student's growth, learning process, what motivates and encourages them to learn, and the problems they face at each stage[10]. Therefore, educational curricula and teaching materials should serve both the student and the teacher.

- Nature of Content: Readers of Arabic language texts often encounter textual units that fail to stimulate their interest in acquiring sophisticated language due to their lack of excitement and motivation. This deters readers from engaging with the texts and hinders their acquisition of the Arabic language. In modern didactics, content and curriculum are determined based on external and internal standards. External standards are linked to the learning environment and the goals learners seek to achieve, while internal standards are related to the content itself, rather than the characteristics of the learners[11]. It is essential to consider both external and internal standards when selecting Arabic language content.

- Methodology in the Didactics of the Arabic Language: We find a teacher with an old traditional heritage background working within a conventional cognitive movement, while the teacher holds more significance than in other educational systems, as the teacher ensures the performance of teaching tasks. In the era of globalization, the old educational curriculum no longer has a place within the framework of technology, techniques, and modern teaching methods. The new curricula allow learners to produce language in a shorter time and with less effort, unlike the methodology employed for Arabic language teaching, which targets memorization skills at the expense of many other skills that need to be activated to understand Arabic language content, encompassing its linguistic structure and performance[12]. These methods mostly depend on rote learning without regarding learners' needs, which can be considered a factor that alienates many learners due to the lack of an approach that allows them to appreciate the language.

This is the current state of the didactics of Arabic language education, and considering the broader context, its position and importance within its environment become evident, along with its potential for growth.

1. The Effectiveness of Technological Applications in Teaching Arabic:

Using modern technologies in education is a methodological process sought at improving quality. It assists in conceptualizing, executing, and assessing the learning process. Educational institutions should use these technologies to facilitate learning and communication between students and teachers. There should be no fear in open-source platforms as long as they are stable, secure, and compatible with free educational systems. On the other hand, these technological programs assist prepare students for professional life, save time and effort for teachers when delivering information to students, and allow students to access new information that may be difficult to obtain through traditional methods. Therefore, technology has two main uses: first, as a teaching tool where the computer guides the user, and second, as a means of teaching and learning[13]. Among the most significant forms of these technological applications that emphasize their effectiveness in the learning process are:

- Learning Environment:

This term demonstrates the initial use of personal computers or laptops, which was initially limited to computer labs equipped with different devices, projection screens, or projectors to facilitate the presentation of information to students and other computer programs. These technological advancements significantly facilitated information delivery to students, making classroom sessions more effective with diverse methods such as PowerPoint presentations, instructional videos, and others. However, these applications remained limited to the classroom environment.

Distance Learning:

Distance learning is a method of learning that employs modern technology, depending on delivering educational content to learners utilizing modern information technologies such as the internet, email, and Skype in a way that enables active interaction with the content, peers, and teachers synchronously or asynchronously, anytime and anywhere, to suit the learner's circumstances and abilities, with the teacher's role in managing the educational process varying relying on the method of information reception. Many online education models are employed in many universities worldwide, such as educational platforms like Zoom, Microsoft Teams, and others. Working on these platforms requires activating communication between the teacher and the learner. There is an increasing need to utilize tools that help the teacher transform their session into an interactive one. This type of education benefits from the technologies provided by the virtual world, such as educational programs, audio recordings, videos, and platforms that enable interaction between the teacher and the learner through voice and image while presenting educational content.

Blended Learning:

Blended learning refers to integrating strategies of direct learning in traditional classrooms with electronic learning tools such as the internet, which allows the learner to receive information from the internet with the teacher's voice as a guide by offering useful instructions during the class. Through such a process, it ensures linking what many of our learners seem interested in and preoccupied with electronic devices and what they should be during teaching at various levels. This necessitates programmers to consider the requirements of the conditions in which the learner lives, given the astounding cognitive expansion. It has become imperative for educational systems to formulate new goals and objectives that keep pace with cognitive development. This calls for interest in renewing teaching methods in an effective and beneficial way[14]. Through harmonizing the nature of the Arabic language with technological media, we ensure an effective framing of Arabic language units and a conscious presence of their teachers.

SMART Boards:

Also known as interactive whiteboards, SMART Boards are a display device. When connected to a computer and a data projector, they transform into a large, high-resolution, clear computer screen. They store all information, data, and drawings and can transfer them to students' computers.

YouTube and Social Media:

Social media platforms (such as Facebook, Twitter, etc.) constitute some of the most significant technologies employed to improve relationships between students and their teachers and among students themselves. They allow the dissemination of essential articles and lessons that contribute to activating the Arabic language, capturing students' interest, and stimulating their thinking. In this regard, Arabic language teachers often schedule regular extracurricular activities to communicate with their students, provided it is conducted in standard Arabic. YouTube is also a famous and distinguished educational website that offers many helpful video clips for students. Teachers can also record lectures and lessons and publish them on YouTube.

Cloud Sharing[15]:

Cloud-sharing services such as Dropbox, Google Drive, Microsoft Sky Drive, and Apple iCloud are utilized to facilitate students in sharing their study notes and presentations, enabling other students to access and store them.

The Arabic language has witnessed increasing interest, as the demand for learning it has not been limited to Arab expatriates and their children only. Even foreigners have shown interest in learning Arabic. However, the need for more programs and educational institutes hinders fulfilling desired goals and keeping up with this growing demand. Consequently, some Arab and foreign academic institutions have taken the initiative to create technological programs and

applications that offer an interactive learning environment to teach Arabic to all interested parties, whether individuals or institutions.

One notable initiative advocating for the teaching, development, and improvement of the Arabic language according to effective modern teaching methods is the electronic program:

Program: "Learn Arabic, Be Proficient at Home"[16]

This program was launched by the Islamic Educational, Scientific and Cultural Organization (ISESCO) in collaboration with the Granada Foundation for Publishing and Educational Services through its Arabic Language Center for Non-Arabic Speakers and its Information, Documentation, and Publishing Center. This digital program is part of the efforts to support member states and the international community in confronting the COVID-19 pandemic and mitigating its effect on education, science, and culture. The organization concluded that this program would enrich the national contents of distance education and facilitate Arabic language students, whether in urban or rural areas, to continue learning this language in their homes amidst health emergencies and school closures.

Program: "Arabic Online"

This program, designed by the Saudi Electronic University, meets the needs of Arabic language learners by offering a comprehensive electronic program that enables the study of Arabic anywhere in the world without time or geographical constraints. It seeks to reach the largest possible number of learners, transcending the limitations of traditional education and providing cost-effective educational solutions, eliminating the need for travel and commuting. The program endeavours to deliver outstanding Arabic language education to non-Arabic speakers, fulfilling the latest global standards and best practices in language learning and teaching through an innovative electronic curriculum that fosters the spread of the Arabic language and its culture worldwide[17].

Program: "Arabic for Everyone"

The "Arabic for Everyone" program seeks to establish Arabic language education for non-native speakers, leveraging modern technology to serve Arabic language education. It supports and helps institutions teaching Arabic worldwide, focusing on curriculum development, teacher training, and the production of diverse educational resources. The program highlights that Arabic is easy and beloved when taught employing the correct methodology, including the following four essential elements: A- Good curriculum B- Well-trained teachers C- Dedicated students D- Suitable learning environment[18].

Conclusion :

The role of electronic programs and applications in teaching Arabic is significant in modern educational thought. These programs and applications seeks to create a rich learning environment that responds to the needs of learners and motivates them to participate and interact. Below are the critical conclusions concerning the effectiveness of electronic programs and applications in learning and teaching Arabic:

- Investing in technological programs and applications for teaching Arabic adds attractiveness and excitement to the educational process, assisting learners acquire the language, understand its rules, and establish connections between language, shapes, colors, and sounds.
- Teaching Arabic is not just about transferring content and ideas; it is about creating positive attitudes and situations towards the language and motivating speakers and learners to teach and learn it.
- Electronic programs and applications play a supportive role in the educational process as tools and strategies utilized by both teachers and learners.

- Learners can employ electronic applications to acquire knowledge, experiences, and skills because these applications can store, organize, and retrieve information, thus reducing learning time, raising fulfillment, and reinforcing content.
- Using assessment tools in electronic programs and applications enables measuring communicative and skill-based competencies in Arabic learners.
- Electronic programs and applications offer multiple educational alternatives and methods, enabling learners opportunities for self-learning and feedback.
- Adopting electronic programs and applications for learning and teaching Arabic does not negate the roles of teachers and educational institutions.

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