



THE IMPLEMENTATION OF TECHNOLOGY IN THE DEVELOPMENT OF ARABIC LANGUAGE TEACHING MATERIALS

Nur Rafidah¹ & Andi Abdul Hamzah²

^{1,2}Postgraduate Program of Universitas Islam Negeri Alauddin Makassar, Indonesia

Correspondence Email: nurrafidah2811@gmail.com

ABSTRACT

This research discusses the application of technology in the development of Arabic teaching materials, which has become a strategic step to enhance the effectiveness of learning and material accessibility. Technology allows the development of interactive teaching materials, such as digital modules, multimedia-based applications, and online learning platforms, aiming to improve the effectiveness of Arabic language learning at the elementary education level. This research shows that the use of technology can increase students' interest and motivation to learn and facilitate teachers in designing digital-based evaluations. However, the application of technology in the development of Arabic teaching materials is not without challenges, such as infrastructure limitations, lack of educators' digital competence, and development costs. Therefore, collaboration between educational institutions, technology developers, and the government is necessary to ensure optimal and sustainable implementation of technology.

Keywords: Technology; Arabic language; development of teaching materials

1. INTRODUCTION

In the current digital era, students are not only limited to learning in the classroom with conventional textbooks, blackboards, and the teacher as the sole source of knowledge. Digital technology has opened the door to expanding the methods and media available for student learning, thereby allowing for increased effectiveness and efficiency in education. In the rapidly advancing and developing Era 4.0, technology has become a crucial tool in learning activities. The development of science has enabled technology to become an efficient means of searching for and accessing various learning materials quickly. The utilization of digital technology in the learning process holds tremendous potential to accelerate the acquisition of learning skills and enhance students' life skills, while also simplifying the tasks of educators in preparing learning materials.

First of all, digital technology has transformed the learning methods used in educational environments. In the past, traditional learning methods were often dominated by teacher lectures and passive student learning. However, with the advancement of digital technology, more interactive, collaborative, and problem-based learning approaches have become possible.

Students can now engage in more interactive learning experiences, utilizing multimedia resources, simulations, and various learning software. These methods encourage active student participation, direct involvement in problem-solving, and critical thinking, which in turn can enhance students' understanding and skills.

The learning process is not just about transferring knowledge from educators to students, but also about how education can facilitate students in acquiring knowledge, attitudes, personality, and independence. Conducting the education process requires a lot of work and involvement from the learning components, one of which is the teacher. A teacher is required to design the learning process by creating an appropriate learning atmosphere so that the learning process can take place effectively, efficiently, and pleasantly. Although technology has a significant role, it does not mean that the technology used in education can replace the role and function of an educator or teacher. Therefore, to balance technological advancements, teachers are encouraged to continuously strive to provide quality learning services for all students to optimally develop their potential. In this regard, teachers must be able to maximize their creative ideas, demonstrate their professionalism, and create a pleasant impression while positioning themselves as teachers.

Teachers, as implementers of education, must be able to prepare appropriate learning through models that suit the needs and abilities of students by considering their environmental conditions to achieve the predetermined minimum competencies and bring innovation in the learning process for improving the quality of education. To achieve this, teachers can use various learning models that stimulate student engagement in the learning process. One of the learning models that can be used is the use of technology to support the learning process both inside and outside the classroom.

2. METHODS

This research uses a qualitative approach with a case study design to explore the application of technology in the development of Arabic teaching materials in various educational institutions. The aim of this research is to investigate the various techniques and technological tools used by educators in creating teaching materials and to evaluate their effectiveness in enhancing students' understanding of the Arabic language.

3. RESULTS AND DISCUSSION

a) Educational Technology

Chronologically, various media have been used ranging from simple to advanced. In the early 1900s, learning used print media, radio, and audiovisuals. Then, learning massively used radio and television in both formal and non-formal educational institutions. In the 1960s, learning began to use teaching machines, and ten years later, the application of instructional design emerged, making learning more systematic and systemic. In the 1990s, the use of computers for interactive learning developed, and the emergence of more advanced communication technology led to the advent of e-learning and online learning as internet-based learning.

Educational technology is the study and ethical practice of facilitating learning and improving performance by creating, using, and managing appropriate technological processes and resources. In other words, educational technology is the process of integrating technology into education to enhance the quality of learning. The existence of educational technology is

created to help increase efficiency and effectiveness in learning. In the world of education, there are certainly many digital technology products available that can support the learning process or serve as learning aids, including:

1. Online learning platforms Platforms like Google Classroom, Moodle, or Edmodo can be used to provide materials, assignments, exams, and online discussions.
2. Educational applications Applications such as Microsoft PowerPoint, Canva, and Powtoon can be used in the learning process.
3. Digital assessment tools Digital assessment tools can evaluate students' understanding in real time and provide rational feedback.

b) Digital-based teaching material design

1. Concepts and principles of digital instructional design

Instructional design is the process of creating effective, engaging, and efficient learning experiences. This design incorporates behavioral psychology, education, and communication strategies to create meaningful training materials for learners. Instructional design is the process of developing effective and efficient materials. With the use of technology, instructional design has become an essential component in the world of education. Instructional design allows educators to create engaging and interactive learning experiences that meet the needs of students.

The principles of instructional design that can be used to create engaging learning solutions are as follows:

- a. Clearly defining learning objectives and determining what learners need to achieve
- b. Using assessments to ensure learners achieve the learning objectives
- c. Providing timely and personalized feedback to help learners improve their performance
- d. Designing to motivate learners to actively engage
- e. Considering individual differences among learners, such as knowledge, skills, and learning styles
- f. Actively capturing learners' attention and asking questions

2. Interactive teaching materials

Interactive teaching materials are the core teaching materials for each course, designed to be comprehensive and complete (self-contained), capable of stimulating meaningful mental and physical learning interactions and activities, and can be studied independently (self-instructional material). In terms of packaging, interactive materials are packaged in digital form as well as printed, accompanied by a flash drive.

c) learning management system (LMS)

A Learning Management System (LMS) is a digital platform specifically designed to support the success of learning. An LMS is software that can automatically handle the administration, documentation, and reporting needs of a teaching and learning activity, all of which are done online.

One of the most important elements used to implement online learning is the availability of a Learning Management System (LMS). According to Ryan K. Ellis (2009), in his book, an LMS is

software used for administrative purposes, to carry out documentation, to generate reports, or to create materials during the online teaching and learning process connected to the internet.

Examples of Learning Management System (LMS) platforms that can be options for education providers include:

1. Google Classroom

Google Classroom is a free e-learning digital platform that can be utilized as an LMS for both online and blended learning.

2. Schoology

Like other LMS platforms, Schoology offers several features that can be utilized in the learning process to support teachers' performance in providing educational services and helping students gain meaningful learning experiences. Some of these features include Courses, Groups, and Resources.

3. CodeChum

CodeChum is one of the LMS that can be used for free or paid. CodeChum includes learning features such as overview, problems, activities, and classes. The overview feature can be utilized for class activities such as discussions. The problems feature provides various relevant problems to stimulate students' independent learning activities. The activities feature contains class activities during the learning process. Through this facility, teachers can reflect on learning activities, which can be used as a reference for the development of the learning process.

4. Edmodo

Edmodo is one of the LMS platforms that has various features that can be used by teachers (Teacher Account), students (Student Account), or parents (Parent Account). There are various features such as the Group feature, Quiz feature, Polling feature, and Assignment feature along with settings for assignment submission deadlines.

d) Use of E-Assessment

According to Richard I. Arends (2008), assessment is a process of gathering information about students and the classroom for instructional decision-making purposes. Essentially, assessment is another term for evaluation. The term assessment is closely related to evaluation, which is a method for obtaining learning outcomes from students. Thus, the assessment process is carried out to determine the extent of students' learning achievements.

E-assessment means the use of technology to manage and provide assessments that are diagnostic, summative, or formative in nature. E-assessment is a significant breakthrough in the field of education because students receive instant feedback. E-assessments can be in the form of portfolios and case studies, or the simplest form of multiple-choice. In its preparation and implementation, e-assessment requires proficient human resources in operating ICT equipment and expertise relevant to the subject being assessed. Therefore, proficiency in preparing and operating e-assessments is a real-world challenge that every educator must possess.

4. CONCLUSION

Educational technology is the study and ethical practice of facilitating learning and improving performance through the creation, use, and management of appropriate technological

processes and resources. In other words, educational technology is the process of integrating technology into education to enhance the quality of learning. The existence of educational technology is created to help increase efficiency and effectiveness in learning.

Instructional design is the process of developing effective and efficient materials. With the use of technology, instructional design has become an essential component in the world of education. Instructional design allows educators to create engaging and interactive learning experiences that meet the needs of students. A Learning Management System (LMS) is a digital platform specifically designed to support the success of learning. An LMS is software that can automatically handle the administration, documentation, and reporting needs of a teaching and learning activity, all of which are done online. E-assessment means the use of technology to manage and provide assessments that are diagnostic, summative, or formative in nature. E-assessment is a significant breakthrough in the field of education because students receive instant feedback.

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Authors' contribution

This paper was written in collaboration between Nur Rafidah, as the first author, and Andi Abdul Hamzah, as the second author, who is also the lecturer responsible for the course on the development of Arabic teaching materials. As the first author, I am responsible for collecting and analyzing data as well as drafting this journal. The development of ideas and concepts related to the theme of applying technology in the development of Arabic teaching materials. Andi Abdul Hamzah, as the second author, provided guidance, direction, and deep motivation regarding the process of preparing and formulating theoretical concepts in the writing of this journal. As the supervising lecturer, he provided insights and input related to theories concerning the application of technology in the development of Arabic teaching materials. Additionally, he corrected and provided suggestions for improving the manuscript to become a scientific work ready for publication.

REFERENCES

<https://www-ardentlearning-com.translate.goog/blog/>.

<https://guruinovatif.id/artikel/caramemanfaatkanteknologidalampendidikanyangguruharustahu>

<https://pba.umy.ac.id/tiga-aplikasi-bermanfaat-untuk-belajar-bahasa-arab/>

<https://www.edmodo.com/>.

Hidayat, N., & Khotimah, H. (2019). Pemanfaatan teknologi digital dalam kegiatan pembelajaran. *Jurnal Pendidikan Dan Pengajaran Guru Sekolah Dasar (JPPGuseda)*
Inge Widya Pangestika Pratomo dan Rofi Wahanisa, Op.Cit., h. 551

Michael David Clements and Bonnie Amelia Cord, 'Assessment Guiding Learning: Developing Graduate Qualities in an Experiential Learning Programme', *Assessment and Evaluation in Higher Education*, 38.

Ryan K. Ellis, *A Field Guide to Learning Management System*, (Amerika: The American Society for Training & Development, 2009), h.1

Sucianti, dkk. *pedoman pengembangan bahan ajar interaktif*. UT2018.hal4