THEORETICAL BASIS OF ARABIC LEARNING TECHNOLOGY

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Abstract: this article discusses Arabic Language Learning Technology, the research method uses literature with content analysis. research results: Arabic learning technology has become an increasingly important subject in today's world of education. With the development of information and communication technology, the approach to learning Arabic has changed significantly. The theoretical basis of Arabic learning technology involves the integration of traditional learning methods with modern technology, such as mobile applications, online learning platforms, and specialized learning software. This approach allows Arabic learners to learn more interactively, independently, and efficiently. In addition, the theoretical basis of Arabic learning technology also includes the concepts of learning psychology and applied linguistics. By utilizing time-tested learning theories and linguistic principles of Arabic, learning technologies can be designed more effectively. This allows Arabic teachers to create a more engaging and efficient learning experience for learners, thus improving their understanding and mastery of Arabic. By understanding the theoretical basis of this Arabic learning technology, teachers can develop more innovative and adaptive learning strategies according to the needs and development of students.

Keywords: Technology Theory, Learning Technology, Arabic Language Learning.

INTRODUCTION

Arabic language learning has become an integral part of the educational curriculum in various countries, including in Indonesia, one of the countries that has a large community engaged in Arabic language skills. As a global language, Arabic plays an important role in many areas of life, including economics, politics, and science. However, Arabic language learning often faces challenges with teaching methods that are less innovative¹ and less attractive to students. This leads to a lack of interest and motivation of students in learning Arabic, which ultimately negatively affects the quality of their learning.²

Technology has become an important tool for enriching and enhancing learning. With the help of technology, there are various methods and tools that can be used to achieve the goal of learning Arabic effectively and efficiently. Technology can help develop spoken and written Arabic skills and enable more interactive and engaging learning for students.³ In addition, technology can provide access to a wide and diverse range of learning resources so that students can learn Arabic in a broader and meaningful context.

Technology has a very important role in learning language components and language skills in general. One of the key benefits of technology in language learning is its ability to provide broad access to a wide range of learning resources, such as language learning apps, educational websites, and online learning platforms. With technology, students can learn independently and flexibly, allowing them to access learning materials

¹ Rini Astuti et al., "Investigating Innovative Activities for Teaching Arabic in Secondary School," *Uktub: Journal of Arabic Studies* 3, no. 1 (2023): 41–62.

² Muhammad Yasin, Abd Aziz, and Agus Purwowidodo, *Teknologi Pembelajaran Dan Persoalan Pembelajaran Di Indonesia Di Era Pandemi Covid-19*, 2023.

³ Ahmad Mubaidillah et al., "Exploring Basic Problem of Arabic Speaking Skill in Foreign Language Learning," *Lughatu Ad-Dhat* 3, no. 2 (2023): 76–93.

whenever and wherever they are. This helps increase students' motivation and broadens their understanding of the language being learned.⁴

In addition, technology also allows for more interactive and interesting learning. Language learning apps that are equipped with interactive features such as games, quizzes, and learning videos can make the learning process more fun and effective. These features not only help strengthen students' understanding of the language components, but also increase student engagement in learning. With technology, students can learn in more interesting and diverse ways, thus helping to improve their overall language skills. ⁵

Technology also enables more effective collaboration and communication in language learning. Through online learning platforms, students can interact with fellow students and teachers without being limited by time and space. This allows for online discussions and group work, which can help improve students' understanding of the language component and language skills.

Technology also facilitates more effective assessment and feedback in language learning. Various language learning apps and platforms provide features to measure student progress, assign assignments, and provide real-time feedback. With technology, teachers can provide faster and targeted feedback to students, helping them to continuously improve their language skills.⁶

Rahmat Iswanto in his journal aricle entitled "Arabic Language Learning with the Use of Technology" The result of this article is the

⁵ Philip Hubbard, "A General Introduction to Computer Assisted Language Learning," *Computer Assisted Language Learning: Critical Concepts in Linguistics*. 1 (2009): 1–20.

⁴ D Healey and M Warschauer, "Computers and Language Learning: An Overview," *Language Teaching*, 1998, 57–71.

⁶ Carol A. Chapelle, "Computer Applications in Second Language Acquisition," Computer Applications in Second Language Acquisition, 2001, https://doi.org/10.1017/cbo9781139524681.

application of technology in Arabic language learning, namely technology can play a role in the harmony and sustainability of Arabic learning from elementary to upper secondary levels, technology can make students more interested in learning Arabic, technology can create realization and relevance to what participants feel education, technology can create more varied Arabic learning media that have been lacking, technology can improve the ability or competence of teachers in teaching Arabic, technology is able to utilize the allocation of time for Arabic language learning, technology is able to create an Arabic-language environment.⁷

Zohra Yasin in a journal article entitled "The Effectiveness Of Affective Domain Development Through The Use Of Arabic Language Learning Technology". The result of this article is that the existence of learning technology in Arabic subjects for the achievement of goals, especially in the affective realm of students, has a fairly high and decisive urgency. Thus, Arabic language learning with learning technology has a close relationship in terms of achieving national education goals as the ideals of the entire Indonesian nation.⁸

RESEARCH METHODS

The study of this research uses a literature review in which literature taken in accordance with the subject matter and analysed in depth so that conclusions and findings can be drawn. in depth so that conclusions and findings can be drawn in research. Literature taken from both books and journals. The analysis uses content analysis.

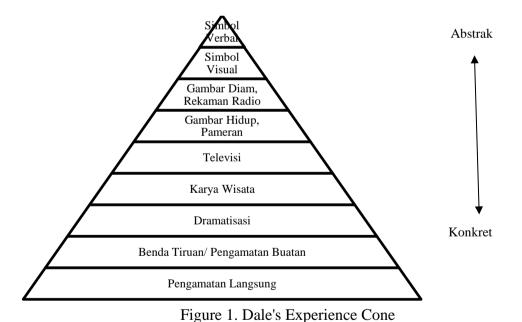
⁷ Rahmat Iswanto, "Pembelajaran Bahasa Arab Dengan Pemanfaatan Teknologi Arabiyatuna: Jurnal Bahasa Arab, Vol. 1, No. 2, 2017," *Arabiyatuna : Jurnal Bahasa Arab* 1, no. 2 (2017): 139.

⁸ Zohra Yasin, "Efektivitas Pengembangan Ranah Afektif Melalui Penggunaan Teknologi Pembelajaran Bahasa Arab," *At-Tajdid : Jurnal Ilmu Tarbiyah* 2, no. 2 (2013): 257–74.

RESULTS AND DISCUSSION

A. History Background and Learning Technology

Learning technology grew out of the educational practices and audiovisual communication of the movement. Educational technology was originally thought of as device technology, which deals with the use of devices, media, and space to achieve educational goals, in other words teaching with audiovisual aids. Educational technology is a combination of three streams of common interest, namely media in education, learning psychology and systematic approaches in education. Edgar Dale and James Finn are two figures who contributed to the development of modern educational technology.¹⁰ Edgar Dale presents the experience (Cone of Experience) as shown in Figure below



10 Masykur Wiratmo, "Berbagai Teori Mengenai Perkembangan Teknologi," Jurnal Siasat Bisnis 1, no. 8 (2003): 53-63, https://doi.org/10.20885/jsb.vol1.iss8.art4.

⁹Ali Akbar et al., "Penerapan Sistem Teknologi Pembelajaran Dalam Pendidikan Nasional," Al-Ubudiyah: Jurnal Pendidikan Dan Studi Islam 4, no. 1 (2023): 119-30, https://doi.org/10.55623/au.v4i1.201.

B. Definition of Learning Technology

The formulation of understanding learning technology has undergone several changes in line with the history and development of learning technology itself. Below are some definitions of educational technology that have implications for the development of educational technology.¹¹ The first is according to the AECT Association-Definition 1963. Audiovisual communication is a branch of educational theory and practice that focuses primarily on the design and use of messages as a guide to the learning process, which includes the following activities: (a) explore the weaknesses and strengths of messages in the learning process; (b) structuring and systematizing the people and tools of the educational environment, including: design, production, selection, management and use of components and the whole learning system. The aim of this practice is to effectively use all communication methods and tools to help develop students to their maximum potential." Although it remains to use the term audio-visual communication,¹² the above definition provides a basic framework for further educational development. technology and to encourage improved learning.

According to the definition of the AECT (Association for Educational Communications and Technology) in 1970, learning technology is the use of science and technology to design, develop, implement, evaluate, and manage the learning process. This definition emphasizes the importance of utilizing science and technology in an educational context to create a more effective and efficient learning experience. Learning technology is not only concerned with the use of

¹¹ Wiratmo.

¹² Muhamad Fatkhul Muin, David Arlentriadi, and M Kholis Amrullah, " تعبير الجمل في سورة in Proceeding of Annual International Conference on Islamic Education and Language (AICIEL), 2023, 146–68.

¹³ Seels Barbara B and Richey Rita C., "Definition of the Field of Instructional Technology History and Evolution of the Definition," 2013, 1–8.

hardware and software, but also involves a deep understanding of how technology can be applied in the learning process to achieve desired educational goals. By adding the term "specific purpose", the design seems to try to adapt B.F. Skinner (one of the figures of behavioral psychology) in learning This formulation also sees the importance of learning the methods and techniques used to achieve certain goals.

The second definition according to MacKenzie and Eraut in 1971 "Technology education is the systematic study of how to achieve educational goals." The earlier definitions contained the terms "machine", instrument" or "medium", while MacKenzie and Eraut's definitions did not mention software or hardware, but were more process-oriented. 15

In 1972, AECT tried to revise the existing definition from the first definition (1963, 1970, 1971) with the following formulation: "Educational technology is a department whose mission is to facilitate human learning through systematic efforts: identification, development, organization, and use of various learning resources, as well as the management of the entire process". This definition is based on the spirit to make audiovisual communication a field of study. This provision develops the idea that educational technology is a profession. The fourth definition of AECT 1977 "Instructional technology is a complex and integrated process involving people, procedures, ideas, tools, and organizations for problem analysis, problem solving, design, implementation, evaluation, and management in all areas of human learning. Definition (1977) seeks to identify AECT as such: theory, field,

¹⁴ + for Educational Communications and Technology (AECT) Definition and Terminology Committee, "Definition of Educational Technology," *Educational Technology*, 2004, 1–14.

¹⁵ James J Heckman, Rodrigo Pinto, and Peter A. Savelyev, Learning Technologies In Education: Issues and Trends, Angewandte Chemie International Edition, 6(11), 951–952., 1967.

and profession. The previous definition, except in 1963, did not emphasize educational technology as a theory. The sixth definition of AECT 1994 "Instructional technology is the theory and practice of planning, developing, using, managing and evaluating learning processes and resources." ¹⁶

Although this definition is only expressed simply, it actually contains a deep meaning. The purpose of the definition is to further strengthen learning technology as a field and profession which certainly needs to be supported by a solid theoretical and practical foundation. This definition also aims to conclude the field or field of activity of educational technology. In addition, this definition tries to emphasize the importance of processes and products.

If you look at the content of the definition of learning technology above, it seems that learning technology periodically undergoes a "metamorphosis" towards perfection. Originally thought of only as a broader system tool, only practically oriented to theory and practice, from products to processes and products, and finally through the course of its evolution, now the study of technology has become a field and profession.

Together the rapid development and advancement of science and technology, especially in the fields of education, psychology and communication, means that in the future educational technology will develop and strengthen as a profession and field that can provide additional benefits in terms of efficiency, and efficiency. Learning.

At the same time, it must be recognized that the development of the field and profession of educational technology in Indonesia has not

Barbara B. Seels and Rita C. Richey, "Seels_instructional_20technology_definition_domains_20of_20the_20fie.Pdf," Instructional Technology: The Definition & Domains of the Field, 1994.

been optimal both in terms of planning, development, utilization, management and evaluation. It seems that there is still serious work to be done by all parties involved in technology learning, both academics, researchers, and practitioners.

C. Learning Technology Area

This year's definition is based on five areas of educational technology, namely design, development, use, management and evaluation. These five things are the domain of the field of educational technology.¹⁷

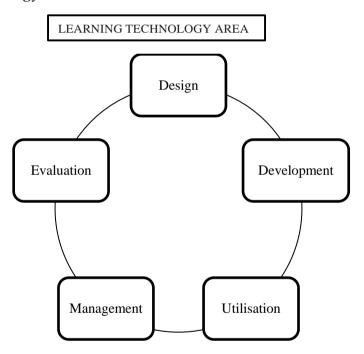


Figure 2, Education Technology Area

The five fields are described below, along with their related subcategories and concepts:¹⁸ The first is the Design Area. Designing here refers to the process of determining learning conditions to create

¹⁷ Aliwar, "Pembelajaran Dalam Konsep Teknologi Pendidikan," *Angewandte Chemie International Edition*, *6*(11), 951–952. 6, no. 1 (2013): 1–23.

¹⁸ Atwi Suparman, "Konsep Dasar Teknologi Pendidikan," Pendidikan Dalam Pendidikan Jarak Jauh, 2019, 1–34.

strategies and products. The field of design originated from the learning psychology movement which was particularly inspired by the thoughts of B.F. Skinner (1954) on the theory of programmed learning (programmed instruction). In addition, in 1969, Herbert Simon's ideas on directive design helped launch design studies. The establishment of design centers for learning and programming materials (such as the "Learning and Development Resource Center") in the 1960s further strengthened design research. In the 1960s and 1970s, Robert Glaser, director of the Learning and Development Resource Center, wrote and spoke about learning design as the core of educational technology.

The second area is the Development Area. Development is the process of converting design specifications into physical form, which includes: (1) printing technology; (2) audiovisual technology; (3) computer technology; and (4) integrated technology. The field of development is rooted in media production. Through a process that lasted for several years, changes in media capabilities brought about regional change. Despite the development of textbooks and other teaching aids (printing technology). In the field of development, there is a complex relationship between technology and theory that drives design, and learning strategies. Basically the development of this region is due to: content-based posts; theory-based learning strategies; and the physical form of technology in the form of hardware, software, and printed technology learning materials; is a method of producing or transmitting static visual material in materials such as books, primarily by mechanical printing or photography. This technique became the basis for the development and use of most other educational materials. The result of this technique is a mold. Text on a computer screen is one example of the use of computer technology in manufacturing. When a text is printed in "print" form for learning purposes, this is an example of deployment in the form of print technology.

The third area is the Utilization / Use / Area. Use is the use of processes and resources for learning. User function is very important because it relates to the relationship between students and the material or learning system. The responsibility of application participants is to match specific materials and activities with students, prepare students to interact with selected materials and activities, guide them during activities, evaluate the results achieved by students and include. They are in organizational practice. The field of use can be the field of educational technology, which precedes the systematic field of design and production of educational media. This field has its origins in the visual education movement in the first decade of the 20th century, the establishment of museums. In the early years of the 20th century, teachers began to try to use theatrical films and subjectrelated short films in the classroom. One of the earliest formal studies of the use of media in teaching was the study of its use by Lashley and Watson.

The Fourth Area is Management. Management includes the technological direction of education: planning, organizing, coordinating and monitoring. The field of management begins with the management of media centers, media programs, and media services. Connecting libraries with media programs creates media schools and experts. The school's media program combines print and non-print materials, increasing the use of technological resources in the curriculum. The practice of learning technology management is becoming increasingly complex, applying and adapting general management theories.

The Fifth Area is the Scope of Evaluation. Evaluation is the process of determining whether the teaching and learning process is adequate, including: problem analysis; reference measurements; formative assessment; and summative evaluation. In the field of evaluation there is a distinction between program, project and product evaluation. Program Evaluation - an evaluation that analyzes the service provider's ongoing teaching activities, often related to curriculum development. For example, evaluate a reading program in a school district, a local government special education program, or a continuing education program at a university.

With these fields, until the definition period in 1994, educational technology had certainty in the fields it developed. Although in the future the number of regions and categories will continue to grow in accordance with the development of technology and education and related disciplines that support it. Each field does not work separately, but has a synergistic relationship.¹⁹

C. Basic Theory of Arabic Learning Technology

The theoretical basis of Arabic learning technology includes learning concepts and practices that integrate information and communication technology (ICT) in the Arabic learning process.²⁰ This includes the development of ICT-based Arabic learning models, which help overcome existing constraints in conventional Arabic learning.²¹ Arabic learning technology includes the use of technological media, such as learning

²⁰ Iswanto, "Pembelajaran Bahasa Arab Dengan Pemanfaatan Teknologi Arabiyatuna: Jurnal Bahasa Arab, Vol. 1, No. 2, 2017."

¹⁹ S Mallon, M dan Bernsten, "Teknoccclogi Pembelajaran Kolaboratif" 8 (2017): 1–12, https://dosen.perbanas.id/teknologi-dalam-pembelajaran/.

²¹ M.Pd.I. Dr. Mahyudin Ritonga, M.A. Dr. Alwis Nazir, M.Kom. Sri Wahyuni, S.Pd.I., "Pengembangan Model Pembelajaran Bahasa Arab Berbasis Teknologi Informasi Dan Komunikasi Dalam Dialektika Revolusi Industri 4.0," *Pesquisa Veterinaria Brasileira* 26, no. 2 (2020): 173–80.

applications, electronic devices, and online applications, to assist students in learning Arabic. The theoretical basis of Arabic learning technology also includes learning strategies that are in accordance with the characteristics of learners, such as integrating technology in learning that affects learner motivation.²²

The use of technology in Arabic language learning has become a topic of increasing interest to researchers. A study conducted by Al-Seghayer (2019) highlights the importance of technology integration in Arabic language learning to increase student motivation and engagement. In his research, Al-Seghayer showed that the use of digital applications and platforms can create an engaging and interactive learning environment for students, thus accelerating the process of learning Arabic.²³

In addition, research by Alomair and Al-Seghayer (2020) also emphasizes the benefits of technology in Arabic language learning, especially in the context of online learning. They found that the use of online learning platforms can facilitate interaction between teachers and students, as well as enable the use of a variety of supportive learning media. Thus, the integration of technology in Arabic language learning not only improves learning efficiency, but also opens up new opportunities in the development of innovative and effective learning methods.²⁴

The use of Arabic learning technology can help students develop Arabic language proficiency, knowledge of Arabic language and culture, and Arabic teaching skills.²⁵ The development of ICT-based Arabic learning models also

²³ Khalid Al-Seghayer, "Unique Challenges Saudi EFL Learners Face," *Studies in English Language Teaching* 7, no. 4 (November 2019): p490, https://doi.org/10.22158/selt.v7n4p490.

²² Zainal Mustofa et al., "Tahlîl Tharîqah As-Sam'iyyah Wa Asy-Syafahiyyah Li Fahmi Al-Mufradât (Tharîqah Al-Bahtsi Al-Mukhtalithah)," *International Journal of Arabic Language Teaching* 5, no. 02 (2023): 259–73.

²⁴ Afsaneh Ghanizadeh, Azam Razavi, and Safoura Jahedizadeh, "Technology-Enhanced Language Learning (TELL): A Review of Resourses and Upshots," *International Letters of Chemistry, Physics and Astronomy* 54 (July 2015): 73–87, https://doi.org/10.56431/p-z6sj8g.

²⁵ Ahmad Syagif, "Paradigma Pembelajaran Bahasa Arab Di Era Society 5.0," *FiTUA: Jurnal Studi Islam* 3, no. 2 (2023): 134–44, https://doi.org/10.47625/fitua.v3i2.407.

helps teachers in developing their skills in teaching Arabic by integrating technology. This is important because a teacher's ability to speak a language does not guarantee that they are skilled in teaching the language.²⁶

In general, the theoretical basis of Arabic learning technology focuses on using technology to assist students in learning Arabic in an effective and efficient manner, as well as assist teachers in developing their skills in teaching Arabic.

CONCLUSION

We have explored the theoretical underpinnings of the use of technology in Arabic language learning. We have seen how technology can enrich and improve the learning process, provide access to a wide and diverse learning resource, and increase student interactivity and engagement. Technology has also shown its potential in overcoming traditional learning barriers and increasing efficiency in the learning process. However, the use of technology in Arabic language learning is also faced with various challenges, including the digital divide, the need for stable internet access, and the challenge of integrating technology with traditional curricula. It is important to continue to conduct research and development in this regard, with the aim of overcoming these challenges and maximizing the potential of technology in improving the quality of Arabic language learning.

The future of Arabic learning with technology offers great opportunities for innovation and development. With the development of more innovative and efficient technology, it is expected to reduce the digital divide, expand access to learning, and create a more interesting and effective learning environment for students. In this context, it is important

²⁶ Samsuar a Rani, "Pembelajaran Bahasa Arab Berbsis Teknologi Informasi Komunikasi," At-Ta'dib 9, no. 02 (2017): 163–77.

for educators and researchers to continue to deepen their understanding of technology and how it can be applied in the context of Arabic language learning. With this, it is expected to improve the quality of Arabic language learning and prepare future generations who are ready to face global challenges in Arabic. Highlighting the importance of continuously researching and developing technology in Arabic language learning, the paper concludes with the hope that technology can be an effective tool in improving the quality of Arabic language learning, as well as preparing students for an increasingly global future.

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