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Teaching Innovation: Increasing the Competency of Arabic Teachers through TELL-Based Learning Technology

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ABSTRACT: This research focuses on increasing the technological competence of Arabic teachers in integrating technology into teaching. The methods used include a mixed approach with quantitative surveys and qualitative interviews. The research population was Arabic teachers, with a purposive sample. Research instruments include questionnaires and semi-structured interview guidelines. Data were analysed using descriptive statistics and thematic analysis techniques. The results showed that the level of technological skills of Arabic teachers varies, with most teachers feeling quite comfortable using basic technology but less confident with advanced technology. Key barriers identified include lack of technology skills, limited access to devices and the internet, resistance to change, and lack of interactive learning materials. Proposed solutions include ongoing training programs, provision of devices and internet, persuasive approaches to overcome resistance, development of interactive materials, and ongoing technical support. The main conclusion is that ongoing support and solutions focused on the specific needs of Arabic teachers can significantly improve the quality of teaching and students' learning experiences. This research provides valuable insights and practical solutions that can be implemented to overcome obstacles in the integration of technology in Arabic language learning.

1 INTRODUCTION

The Arabic Language Subject Teachers' Deliberation Organization is a forum for discussions or meetings held periodically or as needed, involving Arabic language subject teachers. This forum aims to discuss various aspects related to teaching and learning Arabic in certain educational environments. In this forum, teachers can exchange information, experiences, and provide input and thoughts regarding teaching strategies, curriculum development, problems faced in the learning process, and current topics in the field of Arabic. The need to increase teacher competency in the Arabic Subject Deliberation Forum reflects awareness of the central role of teachers in providing effective education.

Teachers who have high teaching competence can provide a better learning experience for students [1]. In the context of teaching Arabic, aspects of language, culture and teaching methods specific to this language are crucial. The need to improve these competencies can be caused by changes in the curriculum, evolving societal demands, or the need to adapt teaching to better suit rapid developments in Education [2]. The Deliberation Forum becomes a platform where teachers can share their experiences, understanding and challenges, which can be the basis for designing relevant and contextual competency improvement programs.

The existence of the latest technology has changed the entire educational landscape. In this case, Arabic language teachers are faced with demands to integrate technology in their learning process [3]. Increasing competency is not only related to the technical ability to use certain hardware or software, but also to a deep understanding of how to effectively use technology to improve student learning outcomes. Teachers need to understand how to select and assess digital resources that suit Arabic language teaching content and provide deep and meaningful learning experiences [4]. Therefore, the need to increase teacher competence in integrating technology is not only a practical need, but also strategic so that Arabic language education remains relevant and attractive to a generation of students who are increasingly connected to technology.

The results of research conducted by Qudsiati show that Arabic teachers have quite good pedagogical competence, but there are still gaps regarding the implementation of teacher competence. Therefore, the efforts made by schools to improve the competence of Arabic language teachers are by involving Arabic language teachers in educational activities, workshops, training and training related to the required competencies. Arabic Language Teachers still need training in the application of technology because there are many Barriers and Difficulties in Integrating Technology in Arabic Language Learning [5].

In helping teachers overcome the difficulties of technology integration, there needs to be a holistic approach involving training, technical support, resource development, and support from the school or government. In the process of teaching and learning activities, teachers who are skilled and competent in their field are really needed, so that they can apply methods that are appropriate

to the material and can also choose and use appropriate media. Inhibiting factors that are usually faced in the learning process and make it easy for students to lose focus are due to the lack of facilities and infrastructure that support the learning process, limited learning media so that the methods used in learning are less varied, and differences in family backgrounds in understanding religion [6].

Apart from that, in learning a foreign language, new methods and approaches are needed to make language learning more enjoyable. Most students feel that learning Arabic is a lesson that seems boring because it is always faced with a series of memorization [7].

Problems learning Arabic consist of ; linguistic problems phonetic problems/sound system, vocabulary, writing, morphology, syntax and semantics. And non-linguistic problems, including elements of teachers/educators, students, teaching materials and media/infrastructure, as well as sociocultural differences between Indonesia and Arabia, of course have different social conditions which will be a problem in learning Arabic [8].

Research Purposes

Based on the background described, this research aims to :

1. Improving Arabic Teachers' Technological Competence: Assess the current level of technology skills of Arabic teachers and identify competency gaps.
2. Facilitate Technology Integration in Arabic Language Learning: Provide training to Arabic teachers in the use of educational hardware and software.
3. Reduce Technology Integration Barriers and Difficulties: Identify the main obstacles faced by teachers in integrating technology into learning. Design practical solutions to overcome these barriers through technical support and resource development.

This research is expected to make a significant contribution in improving the teaching competence of Arabic teachers through the application of Technology Enhanced Language Learning, so as to create a better and more relevant learning experience for students.

This article is expected to provide contributions on increasing the competence of Arabic teachers, but also offers a model that can be widely applied to improve the quality of education through technology integration. It is hoped that this research can become a reference for other educational institutions in developing similar programs to improve the quality of teaching and learning in various subjects.

2 METHODOLOGY

2.1 Research Design

This research uses a mixed-methods approach which combines quantitative and qualitative methods to answer the research objectives. This approach was chosen to gain a comprehensive understanding of increasing the competency of Arabic teachers in integrating technology in teaching.

2.2 Population and Sample

The population of this research is Arabic teachers. The sampling technique used was purposive sampling, where teachers who had experience and active involvement in teaching Arabic and using technology were selected as respondents.

2.3 Research Instruments

A questionnaire consisting of closed-ended questions using a Likert scale to measure level of technology competency, teaching experience, and attitudes toward technology integration. Semi-structured interview guide to dig deeper into teachers' experiences, challenges and views on the use of technology in Arabic language learning.

2.4 Data Collection Procedure

Quantitative Survey : Questionnaires were distributed to Arabic teachers via an online platform. Qualitative Interviews : Interviews were conducted face to face with several teachers selected based on survey results.

2.5 Data Analysis

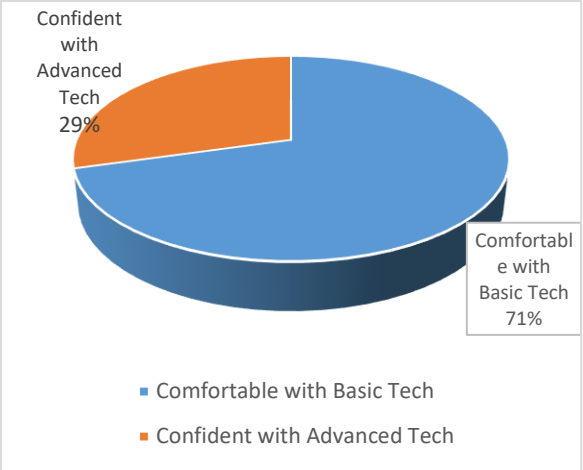
Quantitative Analysis: Data from the questionnaires were analyzed using descriptive statistics to provide a general picture of teachers' technological competence and attitudes. Qualitative Analysis: Interview data were analyzed using thematic analysis techniques to identify key themes emerging from the teachers' experiences and views

3 RESULTS AND DISCUSSION

3.1 Arabic Language Teachers' Technology Skill Levels

This research aims to assess the current level of technological skills of Arabic teachers and identify existing competency gaps. Based on the results of quantitative surveys and qualitative interviews, it can be concluded that the level of technology

skills among Arabic teachers varies. Some teachers have basic skills in using technological devices such as computers, projectors, and simple teaching software, while others show limitations in using more sophisticated, internet-based technologies.



Quantitative surveys show that around 71% of teachers feel quite comfortable using basic technology in teaching, but only 29% feel confident using advanced technology such as Learning Management Systems or interactive learning applications. Qualitative interviews supported these findings by revealing that limitations in technology training and lack of access to digital resources were the main barriers This study highlights the uneven distribution of technological competencies among Arabic teachers, emphasizing the imperative for strategic interventions to enhance proficiency levels. By addressing the identified barriers and leveraging insights from both quantitative surveys and qualitative interviews, educational stakeholders can devise targeted initiatives aimed at equipping educators with the necessary skills to navigate and harness technological advancements in the classroom effectively.

This research aims to assess the current level of technological skills of Arabic teachers and identify existing competency gaps. Quantitative surveys indicate that while around 71% of teachers feel quite comfortable using basic technology in teaching, only 29% feel confident using advanced technology such as Learning Management Systems or interactive learning applications [9]. Qualitative interviews further revealed that limitations in technology training and lack of access to digital resources were the main barriers.

The findings of this study highlight the uneven distribution of technological competencies among Arabic teachers, emphasizing the imperative for strategic interventions to enhance proficiency levels. Studies in Africa have revealed that the majority of teachers lack essential technological knowledge and need extensive professional development to apply technology in teaching [10]. In the context of Arabic language teachers, the most important competency is language proficiency, and teachers have varying levels of competence in Arabic grammar and topics [11].

By addressing the identified barriers and leveraging insights from both quantitative surveys and qualitative interviews, educational stakeholders can devise targeted initiatives aimed at equipping educators with the necessary skills to navigate and harness technological advancements in the classroom effectively. Research has shown that technology can play a role in the harmony and continuity of Arabic learning from elementary to senior high levels and can create realization and relevance to what students feel [12].

3.1.1 Correlation Analysis between Comfort in Using Basic Technology and Trust in the Use of Advanced Technology

The data for this analysis was collected through a survey conducted on a group of Arabic teachers. Respondents were asked to rate their level of comfort in using basic technology (scale 1-10) and their level of confidence in using advanced technology (scale 1-10). Data collection was carried out using questionnaires distributed online. Results of the analysis:

Average comfort in using basic technology ($\bar{X}$ = 6.3

Average confidence in using advanced technology ($\bar{Y}$) = 4.7

Pearson Correlation Coefficient :

To measure the relationship between the two variables, the researcher calculated the Pearson correlation coefficient using the formula :

$$r = \frac{\sum(X_i - \bar{X})(Y_i - \bar{Y})}{\sqrt{\sum(X_i - \bar{X})^2 \sum(Y_i - \bar{Y})^2}}$$

After calculating using the existing data, the Pearson correlation coefficient result was obtained as r = 0.68. Pearson's correlation coefficient r = 0.68 shows a moderate positive relationship between the level of comfort in using basic technology and the level of confidence in using advanced technology. These results show that Arabic teachers who feel more comfortable with basic technology tend to have higher confidence in using advanced technology. This research shows the importance of increasing teachers' comfort level in using basic technology as a first step to increase their confidence in adopting advanced technology. Learning and training strategies that focus on strengthening these foundational skills can help prepare teachers to be more skilled in integrating modern technology in Arabic language learning

The findings from this study are consistent with previous research that has explored the link between technology comfort and trust in advanced technology applications [13]. Technology acceptance and comfort levels have been identified as key

predictors of the successful integration of technology in educational settings [14]. Based on the results, it is recommended that targeted training programs be implemented to improve Arabic teachers' overall digital literacy and confidence in utilizing a wide range of educational technology tools. Enhancing teachers' abilities in technology use can positively influence their willingness to experiment with and leverage advanced technologies in their classrooms [15].

3.2 Technology Integration in Arabic Language Learning

To facilitate the integration of technology in Arabic language learning, an important step that needs to be taken is to provide comprehensive training to Arabic teachers regarding the use of educational hardware and software. This training is designed to meet the specific needs of teachers in teaching Arabic, as well as providing the skills necessary to utilize technology effectively in the learning process. Educational Software Usage: Learning Management Systems training on using platforms such as Google Classroom, Moodle, or Edmodo to manage online classes, assign assignments, and communicate with students. Language Learning Applications, Introduction and training in the use of Arabic learning applications such as Kahoot, Duolingo, Memrise, or Rosetta Stone. Online Collaboration Tools, use of collaboration tools such as Google Docs, Padlet, or Jamboard to increase interaction and collaboration between students and teachers.

3.3 Reducing Technology Integration Barriers and Difficulties

3.3.1 Identifying the Main Obstacles Teachers in Integrating Technology into Learning

Based on survey results and interviews with Arabic teachers, the following are the main obstacles identified in integrating technology into learning:

No	Main Obstacles	Obstacle Details
1.	Lack of Technology Skills	Many teachers lack confidence in their technology skills, especially in using educational software and interactive learning tools. Teachers often only have basic skills in using computers and the internet, but are less skilled in using e-learning platforms and language learning applications
2.	Limited Access to Device and Internet	Some schools experience limitations in providing adequate technological devices such as computers, projectors and tablets Unstable or slow internet connections are also an obstacle, especially in rural or remote areas
3.	Resistance to Change	Some teachers show resistance to change and innovation in teaching methods, feeling comfortable with the traditional methods they have used for years Lack of understanding of the benefits of technology in learning causes a lack of motivation to adopt new technology
4.	Lack of Interactive Learning Materials	Availability of digital resources and interactive learning materials in Arabic is still limited Teachers have difficulty finding materials that suit the curriculum and student needs.

As the use of technology in education becomes increasingly prevalent, the integration of technology into Arabic language learning has faced several key obstacles. One of the primary challenges is the lack of technology skills among many Arabic teachers. Many teachers lack confidence in their ability to effectively utilize educational software and interactive learning tools, often possessing only basic skills in using computers and the internet [16]. This lack of technological proficiency can hinder teachers' ability to fully leverage the benefits of technology in the classroom. Another significant obstacle is the limited access to devices and internet connectivity in some schools. Inadequate access to technological devices such as computers, projectors, and tablets can restrict the integration of technology into Arabic language learning. Furthermore, unstable or slow internet connections, particularly in rural or remote areas, can also impede the effective use of e-learning platforms and online language learning applications [17]..

The availability and suitability of digital resources and interactive learning materials in the Arabic language also pose a significant obstacle. Teachers often struggle to find materials that align with their curriculum and meet the specific needs of their students. To address these challenges, a multifaceted approach is required. Providing comprehensive training and support for teachers to develop their technology skills can be instrumental in building their confidence and competence in using technology

effectively in the classroom [18]. Investing in reliable technological infrastructure, including stable internet connectivity and a range of devices, can also significantly improve access and facilitate the integration of technology into Arabic language learning. Moreover, fostering a culture of innovation and collaboration among teachers, as well as curating a rich repository of high-quality digital resources in Arabic, can help overcome the resistance to change and the lack of suitable learning materials [19]. By addressing these key obstacles, the integration of technology into Arabic language learning can be significantly enhanced, ultimately leading to more engaging, interactive, and effective learning experiences for students.

3.3.2 Design Practical Solutions to Overcome These Barriers through Technical Support and Resource Development

To overcome the obstacles teachers face in integrating technology into learning, here are some practical solutions that can be implemented:

No	Practical Solutions	Solution Details
1.	Technology Skills Training and Development Program	Develop ongoing training programs that focus on developing technology skills for Arabic teachers. The program should include basic to advanced training, including use of an LMS, language learning applications, and online collaboration tools. Hold regular workshops and webinars that can be accessed by teachers in various locations, including remote areas
2.	Providing Access to Devices and Internet Connections	Encourage collaboration with governments, technology companies, and non-profit organizations to provide adequate technology tools for schools Seek to improve internet infrastructure in schools, especially in areas with limited internet connections.
3.	Persuasive Approach to Overcoming Resistance to Change	Hold information sessions and discussions that highlight the benefits and successes of using technology in learning. Invite teachers who have successfully integrated technology to share their experiences. Form support groups among teachers to share knowledge and overcome resistance to change.
4.	Development and Distribution of Interactive Learning Materials	Develop relevant and interactive digital resources for Arabic language learning. This can include learning videos, interactive modules, and mobile applications that support language learning. Create a resource sharing platform where teachers can access, upload and share learning materials.
5.	Ongoing Technical Support	Provide easily accessible technical support services for teachers, including help hotlines, online forums, and live consultation sessions Establish a technical support team at the school or district level that can assist teachers in resolving the technical issues they face.

Overcoming barriers to technology integration requires a holistic and sustainable approach. The solutions proposed above focus not only on improving individual teacher skills, but also on providing adequate infrastructure and continuous technical support. In this way, it is hoped that Arabic language teachers can be more effective in integrating technology into learning, which in turn will improve the quality of education and students' learning experiences. Implementation of this solution requires collaboration between government, educational institutions, and the technology community to achieve optimal results.

Integrating technology into language learning has become increasingly crucial, yet teachers face various obstacles that hinder its effective implementation. To address these challenges, a multifaceted approach is necessary, involving targeted professional development, improved access to technology, and strategic support systems. One key solution is to provide comprehensive technology skills training and development programs for Arabic language teachers [20]. The development and distribution of interactive, digitally-enhanced learning materials for Arabic language instruction is another important strategy. Creating a resource-sharing platform where teachers can access, upload, and exchange high-quality digital resources can significantly enhance the

learning experience for students. Providing ongoing technical support is crucial to ensure the smooth integration of technology in the classroom. Easily accessible support services, such as help hotlines, online forums, and live consultation sessions, can empower teachers to navigate and troubleshoot technological challenges [21].

4 CONCLUSIONS

This research found that the level of technological skills of Arabic teachers varies, with most teachers having basic skills in the use of technology but showing limitations in the use of more advanced technology. The main obstacles teachers face in integrating technology are lack of technology skills, limited access to devices and the internet, resistance to change, and lack of interactive learning materials. To overcome these obstacles, this research identifies effective solutions, namely through ongoing training programs, provision of devices and internet connections, persuasive approaches to overcome resistance to change, development of interactive learning materials, and ongoing technical support. It is hoped that these solutions can improve the technological competence of Arabic teachers and make the learning process more effective and interesting for students.

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