



Application of Audio-Visual Learning Media in Increasing Islamic Boarding School Students' Tajweed Learning Outcomes

Abdul Hamid^{1*}, Muhammad Khairuddin Lim Abdullah², Sitti Jamilah Amin³, Abdul Halik³,
Ahdar Ahdar³

¹Student of Pascasarjana, State Islamic Institute of Parepare, Indonesia

²Faculty of Management and Economics, Sultan Idris Education University, Malaysia

³Faculty of Islamic Education, State Islamic Institute of Parepare, Indonesia

Article History:

Received: June 15, 2023

Revised: June 23, 2024

Accepted: June 30, 2024

*Correspondence:

Address:

Terminal Lingkungan 1 Street,
Sidodadi, Wonomulyo, Polewali
Mandar Regency, West Sulawesi
Province, 91342 - Indonesia

Email:

abdullhamidapple1295@icloud.com

Keywords:

audio-visual media, learning
outcomes, learning tajweed

Abstract:

Generally, learning Tajweed in Islamic boarding schools still uses the rote method so the Tajweed material seems difficult and boring. This research aims to (1) describe the application of audio-visual learning media in Tajweed learning, (2) describe the increase in students' Tajweed learning outcomes, and (3) test the effect of applying audio-visual learning media on improving students' Tajweed learning outcomes. This study used experimental research with a quasi-experimental design. The object of this research consists of two classes, namely the experimental class and the control class. The research object was chosen purposively from two classes at the Salafiyah Marhalah Ulya, Tahfidzul Qur'an As'adiyah Wonomulyo Islamic Boarding School. The experimental class was given treatment using audio-visual media, while the control class continued to use the textbook-based lecturing method. Data was collected using observation, tests, interviews, and documentation. The data analysis technique uses a gain test. The research results show that the application of audio-visual media has an effect on increasing students' Tajweed learning outcomes. This research has implications for the importance of innovative and creative efforts by Islamic education teachers in creating audiovisual media for learning the Quran to welcome 21st-century education.

INTRODUCTION

Learning media is known as a teaching aid that should be utilized by teachers (Mayer, Fiorella, and Stull 2020). Unfortunately, the use of media is often neglected in learning. Teachers' problems in using media in learning are generally caused by various reasons, for example, limited teaching preparation time, difficulty finding the right media, costs not being available, or teachers' limitations in using technology (Liu, Geertshuis, and Grainger 2020). This is a challenge for teachers in the 21st century, especially Islamic education teachers who generally still teach classical Islamic books and teach hadith and Quran conventionally (Mun'im Amaly et al. 2022; Kholili 2021; Abdullah et al. 2020).

Survey results from the Institute of Al-Qur'an Sciences (IIQ) Jakarta found that 65% of Muslims in Indonesia are still illiterate in the Quran, 35% can only read the Quran, while those who can read the Quran correctly (according to Tajweed science) are only 20% (Luk 2021).

The results of this survey are truly sad. With the majority of Muslims in Indonesia, apparently there are still many Muslims who cannot read the Quran (Burga 2023).

This problem is the main concern of the Tahfidzul Qur'an As'adiyah Wonomulyo Islamic Boarding School, Polewali Mandar Regency. This Islamic boarding school innovates learning by applying audio-visual media in learning Al-Qur'an Hadith with Tajweed material. This is to increase student motivation and interest while eliminating student boredom in learning Tajweed (Lubis and Mavianti 2022). This innovation is very important because generally learning Tajweed in Islamic boarding schools still uses the rote method. This makes Tajweed material seem difficult, boring, students' interest continues to decrease, and learning outcomes are not optimal (Ulfah and Raihanah 2023).

The solution to these learning difficulties is the use of audio-visual media in learning (Nurhayati, Husain, and Samad 2022; Winarto, Syahid, and Saguni 2020). This assumption is based on the theory of three main cognitive learning styles: auditory (learning with hearing instruments), visual (learning by what he sees), and kinesthetic (learning by practicing) (Ikmal 2023). Meanwhile, audio-visual learning media can be heard, seen, and practiced so that it is relevant to all students with different learning styles (Mohamed and Surat 2023).

Based on previous research, audio-visual learning media has been proven to improve student learning outcomes (Mashudi, Komariah, and Irvan 2021). However, studies on tajweed learning still focus on (1) Analysis of the implementation of tajweed learning in TPQ, madrasas, and Islamic boarding schools (Waslah, Chotimah, and Hasanah 2020; Kusuma 2018); (2) the realm of methods that examines the iqra', ummi, qira'ati, tartil, yanbu'a, al-nahdliyah, and al-barqy methods (Fitriyah and Aisyah 2021; Qiftia 2021; Ainun and Kosasih 2021; Nobisa 2021); (3) the realm of media examines the development of print media, Android-based media, and rotary tajweed media (Istiqomah 2022; Maulana and Nasir 2022; Fadlilah and Abidin 2020); (4) there is indeed research on managing tajweed learning based on audio-visual media using R&D methods, but measuring the suitability of audio-visual media is not based on improving learning outcomes only (Hambali, Rozi, and Farida 2021). This shows that there has been no research that specifically examines the influence of the use of audio-visual media on the Tajweed learning outcomes of Islamic boarding school students.

This research aims to (1) analyze the use of audio-visual media in learning tajweed; (2) describe the improvement in tajweed learning outcomes of students; and (3) test the effect of using audio-visual media on improving the tajweed learning outcomes of students. This research is very important because it not only looks at the influence of learning media on improving student learning outcomes but also shows the success of innovative and creative efforts of Islamic education teachers in creating audio-visual media for learning tajweed.

METHODS

This type of research is experimental research with a qualitative approach. Experimental research was chosen because the researcher will experiment with the application of audio-visual media in tajweed learning (Trianto 2017). The quantitative approach chosen by this research seeks to obtain objective, valid, and reliable data in the form of statistical figures related to the

application of audio-visual media in tajweed learning and its influence on students' tajweed learning outcomes (Sugiyono 2017).

This research design is a quasi-experimental design. In this research, researchers can control all external variables that influence the course of the experiment. Thus, internal validity can be higher (Trianto 2017). The characteristics of this research design are that there are samples in the form of an experimental group and a control group. The sample was chosen deliberately with certain considerations or purposive sampling (Sugiyono 2017).

The location of this research is Salafiyah Marhala Ulya, Tahfidzul Qur'an As'adiyah Wonomulyo Islamic Boarding School, Polewali Mandar Regency. The experimental group for this research was Class X-A Salafiyah Marhala Ulya, totaling 21 students. Meanwhile, the control group was Class X-B Salafiyah Marhala Ulya, totaling 21 students. The consideration for choosing this class was because both of them studied Tajweed material in the Al-Qur'an Hadith subject. Apart from that, both are classes with heterogeneous student abilities and have almost the same (not much different) average class learning outcomes in the Al-Qur'an Hadith subject.

Data was collected by observation, questionnaires, documentation, and tests. Observations were made on the process of implementing tajweed learning using audio-visual media. Questionnaires were conducted on teachers and students to obtain data on the level of practicality of audio-visual media. Documentation was carried out to collect theoretical data about audio-visual learning media and student learning outcomes. The test was carried out using a Quasi-Experimental Design in the form of a Pretest-Posttest Control Group Design in the experimental class and control class.

The questions used for the pretest and posttest in the experimental group and control group were first tested on students of class X-C of Salafiyah Marhala Ulya, Tahfidzul Qur'an As'adiyah Wonomulyo Islamic Boarding School. This class was chosen with the consideration of maintaining the questions that would be given to the research sample when the posttest was carried out. The results of testing the questions are the basis for testing the validity of the questions. The level of validity of question items is based on the following intervals:

$R_{\text{count}} > 1.00$: perfect
$R_{\text{count}} = 0.81-1.00$: very high
$R_{\text{count}} = 0.61-0.80$: high
$R_{\text{count}} = 0.41-0.60$: medium
$R_{\text{count}} = 0.21-0.40$: low
$R_{\text{count}} = 0.00-0.20$: very low (Riduan and Sunarto 2015)

The pretest was carried out to determine the initial conditions or differences between the experimental group and the control group (Sugiyono 2017). Furthermore, the experimental group was given treatment in the form of learning using audio-visual media, while the control group was still taught using the textbook-based lecture learning method. At the end of the experiment, both groups were given a posttest.

This research data analysis technique was carried out by calculating the gain or difference between the pretest and posttest scores. Data processing and statistical tests in this research were assisted by the SPSS Version 26 data processing program. The conclusion in the

reliability test is based on: if the alpha score (R_{count}) is greater than the R_{table} score, then the instrument items are declared reliable; conversely, if the score alpha (R_{count}) is smaller than the R_{table} , then the question items are declared unreliable or inconsistent. It is known that the R_{table} score is 0.360 (Sugiyono 2017). Normality test using “One-Sample Kolmogorov Smirnov.” Data is said to be normal if the calculation results of Asymp. Sig > 0.05. Hypothesis testing uses a t-test (paired sample t-test) with the condition that the data used is normally distributed (Sugiyono 2017).

RESULTS AND DISCUSSION

Results

The results of the reliability test of question items in the experimental and control classes can be seen in the following table.

Table 1. Data Reliability Test Results

Class	R_{count}	R_{table}	Description
Experimental	0.867	0.360	Reliable
Control	0.962		Reliable

Source: Results of statistical data processing

Table 1 shows that the alpha score (R_{count}) of the experimental and control classes is greater than R_{table} 0.360. Likewise, the alpha score (R_{count}) of the two classes is in the interval 0.81-0.100 (Riduan and Sunarto 2015: 80). This means that all the question items are reliable and the level of reliability of the experimental and control class question items is very high.

Furthermore, the results of the validity test for each question item can be seen in the following table.

Table 2. Data Validity Test Results

Question Number	R_{count}	R_{table}	Description
1	0.706	0.360	valid
2	0.566		valid
3	0.388		valid
4	0.387		valid
5	0.464		valid
6	0.491		valid
7	0.461		valid
8	0.503		valid
9	0.634		valid
10	0.503		valid
11	0.622		valid
12	0.452		valid
13	0.692		valid
14	0.453		valid
15	0.452		valid
16	0.604		valid
17	0.585		valid

18	0.557	valid
19	0.453	valid
20	0.613	valid

Source: Results of statistical data processing

Based on Table 2, it can be understood that of the 20 question items, all of them are in the valid category. This is because the R_{count} score for all question items is greater than the R_{table} score ($R_{\text{count}} > R_{\text{table}}$).

After testing the validity and reliability of the data, the gain test was then carried out. The basis for carrying out the gain test is the learning results of the experimental class and the control class. The data is described in Table 3:

Tabel 3. Pretest and Posttest Data in the Experimental and Control Classes

The Calculation Results	Classes			
	Experimental		Control	
	Pretest	Posttest	Pretest	Posttest
Mean	61.90	85.71	55.71	72.38
Median	63	85	55	72
Mode	50	85	50	70
Std. Deviation	9.284	6.761	9.731	7.684
Minimum	50	70	50	60
Maximum	75	100	61	85

Source: Results of statistical data processing

Table 3 shows that the results of the comparison between the average pretest scores for the experimental class and the control class were 61.90 versus 55.71. So, there is a difference in the initial state between the experimental class and the control class with a difference of $61.90 - 55.71 = 6.19$. Meanwhile, the control group in the pretest had a mean score of 55.71, while in the posttest they had a mean score of 72.38. This means that there is an increase of $72.38 - 55.71 = 16.67$. Furthermore, the experimental class on the pretest had a mean score of 61.90, while on the posttest it had a mean score of 85.71. This means there is an increase of 23.81. Apart from that, the comparison between the average posttest scores for the experimental class and the control class was 85.71 versus 72.38. This means that there is a difference of 13.333 in the post-test results between the experimental class and the control class. This can be used as a basis for stating that the use of audio-visual learning media can improve students' tajweed learning outcomes.

Furthermore, the results of the One-Sample Kolmogorov Smirnov test showed that the Asymp. Sig = 0.867 > 0.05, which is the data has a Poisson or normal distribution. Thus, a t-test can be carried out to confirm the effect of using audio-visual learning media on improving students' tajweed learning outcomes. The results of the t-test statistical data processing can be seen in the Table 4.

Table 4. Output T-Test SPSS Application
Paired Samples Test

		Paired Differences						t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference					
Pair	Experiment				Lower	Upper				
1	Class - Control Class	13.333	12.682	2.767	7.561	19.106	4.818	20		.000

Based on Table 4, it is known that the sig (2-tailed) score is 0.000, meaning it is smaller than 0.05 ($0.000 < 0.05$). Apart from that, the T_{count} score is 4.818 with a df of 20 and a significance level of 5%, with a T_{table} of 2.086. This means that the T_{count} score is greater than the T_{table} score ($4.818 > 2.086$). Thus, it can be stated that the application of audio-visual learning media can improve students' tajweed learning outcomes.

Discussion

The innovation and creativity of Islamic religious education teachers by implementing audio-visual learning media has been proven to improve students' tajweed learning outcomes. These findings are in accordance with the research results of Fauzan et al. (2013), who developed audio learning media with tajweed material to improve students' Islamic education learning outcomes. Also in accordance with research by Barus (2021), which found that the use of audio-visual media and the ability to read the Quran influenced students' tahfidz learning outcomes. Including research by Yulisna et al. (2022), which describes improving students' tajweed learning outcomes through audio-visual learning media in high school.

The results of this research also strengthen Sanjaya's (2018) opinion regarding audio-visual media, that learning media functions as a tool in the learning process, in the form of a means that can provide audio and visual experiences to students to increase motivation and learning outcomes. The audio and visual experience felt by students in learning tajweed is an effort made by educators so that students can learn well (Arsyad 2017). Students are said to learn if they can develop their knowledge and then build new knowledge so that they reach a true level of understanding (Nasution 2011). In this way, students not only know the tajweed material theoretically but are also able to apply it when reading the Quran.

The increase in tajweed learning outcomes through audio-visual media also shows the importance of using technology in learning to read the Quran (Yusnanto et al. 2023). Moreover, today's technological developments are not something new in society. New media is a general term to describe the process of delivering information via digital technology (Buckingham 2020). If previously information could only be obtained through newspapers or magazines, now this information can be distributed and accessed via communication devices connected to the internet. The current presence of new media is an instrument that can be used as a learning medium (Gómez-Galán 2020; Zhang, Zhang, and Wang 2020). Teachers, especially Islamic boarding school teachers, are challenged to be able to transform their learning systems to create media that is appropriate to current developments (Safradji 2020).

CONCLUSION

The tajweed learning outcomes of the experimental class and control class students both increased. However, the learning outcomes of the experimental class experienced a higher increase compared to the control class. The application of audio-visual learning media has a positive effect on the students' tajweed learning outcomes at Salafiyah Marhala Ulya, Tahfidzul Qur'an As'adiyah Wonomulyo Islamic Boarding School, Polewali Mandar Regency. This conclusion has implications for the need for Islamic religious education teachers to develop their professional competence in using increasingly sophisticated technology-based learning tools and media. This will also familiarize Islamic boarding school students with following a more modern learning system.

The limitation of this research is that there is no description of the process of preparing audio-visual media for tajweed material by Islamic education teachers. Therefore, the obstacles and solutions in the process of creating audio-visual learning media have not been studied comprehensively. Further relevant researchers need to examine the form of development of audio-visual learning media for tajweed material and then test the level of practicality and effectiveness of the learning media.

AUTHOR'S DECLARATION

Funding

This research was not funded by an institution or funded independently by the author.

Authors' Contribution

Abdul Hamid, as the corresponding author, collected data and prepared research reports. Muhammad Khairuddin Lim Abdullah, as an external examiner for this research, provided technical, content, and method recommendations in writing research results reports. Sitti Jamilah Amin, Abdul Halik, and Ahdar, as supervisors for writing this research report, both provided suggestions so that the research report meets scientific requirements and this article complies with scientific journal writing standards.

Disclosure Statement

The authors declares that there is no conflict of interest in this research.

Data Availability Statement

The data that support the results of this study are available from the corresponding author.

Acknowledgements

The author would like to thank the chairman of the Tahfidzul Qur'an As'adiyah Wonomulyo Islamic Boarding School, Polewali Mandar Regency, for giving permission to collect research data at his institution. Likewise to all Al-Qur'an Hadith teachers and class X Salafiyah Marhala Ulya students who are willing to become informants and samples for this research.

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