IMPLEMENTATION OF MULTIMEDIA LEARNING MODULE ON LEARNING ACHIEVEMENT TO ENHANCE STUDENTS' UNDERSTANDING OF TAWHEED AT BANJARMASIN STATE POLYTECHNIC

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ABSTRACT

The concept of monotheism is the fundamental and most important element in Islam. This research aims to investigate the influence of multimedia learning modules on students' learning outcomes in enhancing their understanding of Tawheed by assessing the effectiveness of multimedia learning modules in improving students' understanding of monotheism. The research method employed was an experimental study involving three groups: one experimental group and two control groups. The population for this study consisted of all civil engineering and geology students, with 25 participants in each group, both in the experimental and control classes within the D-III Civil Engineering program. The sampling technique used was cluster random sampling. The research design utilized a Pretest-Posttest Mixed Design. Data analysis was conducted using the ANOVA Mixed Design in the General Linear Model (GLM) with the assistance of SPSS. The research findings indicate that the pretest-posttest score change in the experimental group is significant, with a Mean Difference (MD) of -27.850, as well as in the control group with a Mean Difference (MD) of -19.850. These score changes indicate that the Multimedia Learning Module can enhance students' understanding of Tawheed. The effectiveness of the Multimedia Learning Module in improving students' understanding of Tawheed is 0.839.
Keyword: Learning Outcomes , Monotheism, Multimedia Learning Module, Understanding

ABSTRAK

Ketauhidan merupakan unsur pokok yang utama dan hal yang paling penting dalam agama islam. Penelitian ini bertujuan untuk mengetahui pengaruh multimedia learning modul terhadap capaian pembelajaran dalam meningkatkan pemahaman ketauhidan mahasiswa dengan cara melihat seberapa besar efektifitas multimedia learning modul terhadap peningkatan ketauhidan mahasiswa. Metode penelitian yang digunakan adalah jenis penelitian eksperimen dengan melibatkan 3 kelas amatan yakni 1 kelas eksperimen dan 2 kelas kontrol. Populasi dalam penelitian ini adalah seluruh mahasiswa jurusan teknik sipil dan kebumian dengan sampel penelitian masing-masing 25 mahasiswa baik pada kelas eksperimen maupun kontrol pada program studi D-III Teknik sipil. Teknik Pengambilan sampel yang digunakan adalah teknik cluster random sampling. Desain penelitian yang digunakan yaitu Pretest-Posttest Mixed Design. Teknik Analisis Data menggunakan analisis Anava Mixed Design pada General Linear Model (GLM) dengan bantuan SPSS. Hasil Penelitian menunjukkan bahwa perubahan skor pretest-postest pada kelompok eksperimen adalah signifikan dengan Mean Difference (MD) = -27.850 begitu pula pada kelompok kontrol dengan Mean Difference (MD) = -19.850. perubahan skor ini menujukkan bahwa MLM dapat meningkatkan pemahaman ketauhidan. Besarnya efektifitas yang diberikan Multimedia Learning Module dalam meningkatkan pemahaman ketauhidan mahasiswa adalah 0.839.
Keyword: hasil belajar, ketauhidan, multimedia learning module, pemahaman.

1. INTRODUCTION

Monotheism (Tawheed) is the fundamental and most crucial element in Islam. Tawheed signifies the belief in the Oneness of Allah, acknowledging that He is the sole God deserving of worship

and devotion, the Creator, the Owner, the Sustainer of the universe, and the Provider of sustenance. Consequently, the knowledge of tawheed is a discipline that imparts understanding of the correct beliefs that guide one's life to attain inner contentment, safety, and happiness in both this world and the hereafter, while also guarding against misleading doctrines (Hadi 2013).

Given the importance of tawheed for students, every educational institution establishes the knowledge of tawheed as the primary foundation. This is because tawheed brings tranquility to the soul, safeguards students from deviance and polytheism. Moreover, tawheed also plays a significant role in shaping one's attitudes and behaviors. If tawheed is firmly rooted, it becomes a strong spiritual force, giving rise to positive attitudes and optimism while dispelling worry and reliance on anything besides Allah. These positive attitudes and behaviors are not only beneficial for the individual but also for others.

Despite the fact that tawheed is taught to students as part of their curriculum, there remains a portion of students who misunderstand and have misconceptions about correctly practicing tauhid towards Allah. These misunderstandings are evident in their daily lives. For instance, some students perform acts of worship with intentions and purposes directed towards entities other than Allah, such as their teachers or other individuals. Additionally, there are students who, alongside praying to Allah, also pray to entities other than Allah or seek assistance from revered places. Some students prioritize their love for someone or fear of fellow beings over their love and fear of Allah. There are students who are negligent in their religious duties and righteous deeds, and some take pleasure in sinful behaviors, engage in promiscuity, and commit sins. In other cases, students become highly susceptible to the influence of radical ideologies. According to the Deputy VII of the State Intelligence Agency (BIN), as many as 85% of millennials are at risk of exposure to such ideologies. (Rahmawati 2023)

If these misconceptions are left unaddressed, the concerned students will experience life's restlessness, such as the unrest in their hearts, perpetual worry, impatience, excessive anxiety, and the loss of the correct life guidance as a Muslim (Winarto 2022). These misconceptions can even lead to deviation (Hadi 2013). To avoid these misunderstandings among students and to enhance student's understanding of monotheism (Tawheed), there is a need for appropriate measures or solutions, one of which is through a thorough study of the ayat-ayat kauniyah (verses related to the universe) and ayat-ayat qauliyah (verses of the word of Allah). Through the study of these verses, students can develop true and strong faith as well as noble character. This is because true and strong faith provides peace and tranquility in worshiping Allah (Nurdin 1995).

MLM aids instructors in easily connecting prior knowledge and reminding learners of important information through hyperlinks. However, learners need not fear that the learning process through MLM is too rapid, as they can control their individual learning pace using the navigation buttons (Sadaghiani 2011). Based on the research findings above, it is evident that interactive multimedia module learning, in the form of a Multimedia Learning Module (MLM), is essential. Its purpose is to help students learn independently, both during class and at home, as well as assist them in addressing misconceptions

related to matters of faith and tauhid. Given this context, the focus of this study is to determine the effect of multimedia learning modules on learning outcomes in increasing students' understanding of monotheism by seeing how effective the multimedia learning module is in increasing student monotheism.

To achieve this objective, this research employs an experimental method involving three observation groups, consisting of one experimental group and two control groups (with one control group for follow-up). The research design used is the Pretest-Posttest Mixed Design, The data were analyzed using Statistical Tests, employing the analysis of Mixed Design ANOVA within the General Linear Model (GLM). It combines two sub-analyses, namely the Within-Subject Test and the Between-Subject Test. Prior to conducting the GLM test, prerequisite tests were performed, including tests for normality and homogeneity.

2. TINJAUAN PUSTAKA

2.1. Understanding of Tawheed

Tawheed is the beginning and end of the call of Islam. It is a doctrine that spans throughout human history, taught by every Prophet and Messenger from Prophet Adam to the time of Prophet Muhammad (PBUH) (Q.S. Al-Anbiya/21: 25). According to Islamic belief, the concept of tawheed centers around faith in the unity of God, affirming that only God is the Creator, the Lawgiver, the Organizer, and the Educator of the universe (Tawheed Rububiyah). Consequently, God alone is the One to be worshipped, sought for guidance and help, and feared (Tawheed Uluhiyah) (Razak 2013) (Nurdin 1995).

Tawheed is the highest belief in Islam and the foundation of faith for a Muslim. In the book "Hanya Allah" (Only God) by H. Abdul Karim Amrullah, Dr. H. Abdul Karim Amrullah explains that 'Ilm at-Tawheed (the Science of Oneness or Theology) is, in his view, an important and significant field of study in Islam. Due to its importance, discussions about matters of faith cannot be separated from this knowledge. (Yumnah 2020)

Therefore, studying the true knowledge of Tawheed (from the Quran and authentic Hadith) is obligatory for Muslims, especially for students who are the reflection and hope of their religion and nation. Learning the true knowledge of Tawheed (from the Quran and authentic Hadith) will shape beliefs that can improve one's relationship with God, providing clarity about the God they worship as the Almighty Being, the only entity to be worshipped, in whose hands the fate of all creatures is determined. Furthermore, it enhances human relationships by encouraging social interaction, doing good deeds, and benefiting others (Nurdin 1995).

Studying the true knowledge of Tawheed (from the Quran and authentic Hadith) is one of the effective methods that can prevent a Muslim from misunderstanding and misapplying the concept of Tawhid, thus keeping them away from misguided practices.

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Vol. 15, No. 2, April-Juni 2025   *Rahmah,, dkk*
ISSN 2089-5127 (print) | ISSN 2460-0733 (online)

Therefore, the Muslim community must truly understand the profound message brought by our Prophet Muhammad, which is the concept of monotheism (Tawheed). Unfortunately, there are still many who do not fully comprehend the teachings of the Prophet Muhammad (peace be upon him); they remain unaware of the essence and meaning of Tawhid's teachings. This is currently the most critical issue facing the Muslim community. Consequently, they seem to be inadvertently drawn into misconceptions and misguided beliefs (WibowoSaputro 2016). Understanding of divinity is an integral part of individual development in various religions and beliefs. This encompasses understanding of God or divine entities, beliefs, teachings, and the role of God in an individual's and society's life. This understanding plays a crucial role in shaping the morals, values, and ethics of individuals and can provide guidance in facing various aspects of life. The importance of understanding divinity is also relevant in the social and cultural context. In multicultural and multi-religious societies, a better understanding of others' beliefs can promote tolerance, harmony, and better understanding between individuals and groups. Therefore, the development of an understanding of divinity in an educational environment becomes crucial. Al-Mahmoud (2017) found that students with a strong understanding of tawheed tend to have a clearer and more directed purpose in life. (Al-Mahmoud 2017) and Koenig et al. (2012) found that students with a strong understanding of tawheed tend to have lower stress levels and higher mental well-being. (Koenig 2012)

One case of a misconceptual understanding of Tawheed is the misunderstanding of some people who equate "Tawheed" as if it were the same as "kalam". Although their goals and intentions are still similar, which is to affirm the Oneness of Allah, they are indeed different. Regarding the definition of kalam, many scholars have provided explanations about the definitions of kalam and Tawhid. For instance, Musthafa Abd ar-Raziq mentions various names for kalam, including the science of religious fundamentals, the science of Tawhid, the jurisprudence of the Great (fiqh al-Akbar), and Islamic theology. It's called the science of religious fundamentals because it deals with the core aspects of religion. Meanwhile, the science of Tawhid is a field that examines the names and attributes that are obligatory, impossible, and permissible for Allah, as well as the attributes that are obligatory, impossible, and permissible for His Messenger. Tawhid also delves into the Oneness of Allah and related matters. On the other hand, the jurisprudence of the Great is a science that deals with matters of faith. This shows us that kalam is similar to Tawhid, with the distinction that kalam places more emphasis on logical reasoning. Therefore, some theologians differentiate between kalam and Tawheed (Bahrudin 2023).

2.2. Multimedia Learning Module (MLM)

To facilitate the study of these verses, it is essential to employ a Multimedia Learning Module (MLM) during the teaching and learning process. MLM is an instructional tool introduced as an introduction before the learning process, with the aim of providing students with preliminary knowledge

before the teaching and learning activities (Sadaghiani 2011); (Chen 2010); (Hazra 2013). MLM, as an instructional medium, is designed in a multimedia format, encompassing presentations that offer features such as text, graphics, videos, animations, audio, and is presented in various representations (Chen 2010); (Leow 2014); (Li 2016); (Huang 2005). The utilization of MLM is also aimed at addressing the perceived inefficiency of textbook usage, where students may not read the entire book, resulting in a lack of important information acquired (Sadaghiani 2011); (Chen 2010); (Hazra 2013). Therefore, the development of learning media is necessary to overcome the ineffectiveness of textbooks. Based on these observations, it can be concluded that MLM is a multimedia presentation-based instructional medium utilized as a prelude to the learning process. The process of creating MLM consists of five phases, as elucidated by (Fraenkel 2012) in Table 1.

Table 1 Multimedia Learning Module

Fase	Description
Understand	Conducting an analysis based on relevant literature related to the issue and needs.
Design	Designing the instruction to present it in an easily accessible technological format, planning student activities, designing assessment and evaluation tools, as well as designing other necessary components.
Build	This stage involves the process of creating MLM from a storyboard to a prototype.
Test and Evaluate	This stage involves testing and improvements related to the module that has been created, content material, information delivery, and the effectiveness of MLM.
Improve	In this stage, there is improvisation based on the improvements made in phase 4 (test and evaluate).

3. METHOD

This research is a type of experimental research using 3 observation classes consisting of 1 experimental class, 2 control classes (1 control class as follow up). The design used is the Pretest-Posttest Mixed Design which can be seen in Table 2

Table 2. Research Design

Group	*Pretest*	Treatment	*Posttest*
Experiment	Y_1	X_1	Y_1
Control 1		X_2	
Control 2 (follow)		X_3	

Y1   : Students' Understanding of Monotheism (Tawheed)
X1   : Using MLM
X2   : Using the monotheism (tawheed) teaching module with conventional learning
X3   : Using PowerPoint with conventional learning

The population in this study were all students majoring in civil and earth engineering. The sample in this study was 20 students from the D-III Civil Engineering Study Program, both in the experimental group and the control group. The sampling technique used is Cluster Random Sampling, namely random selection of samples based on existing classes, not based on individuals [21]. The data analysis technique used is the Anava Mixed Design analysis on the General Linear Model (GLM) because it combines two sub-analyses, namely Within Subject Test and Between Subject Test. Prior to the GLM test, a prerequisite test was carried out consisting of a normality test and a homogeneity test. Normality test is used to determine whether the data obtained is normally distributed or not. The level of significance in this study is 5%. Homogeneity test was conducted to determine whether the sample came from a controlled population or not. The homogeneity test was carried out by using the Box's-M test (Levene.Test). After the Normality Test and Homogeneity Test are met then proceed with the Anava Mixed Design Test on GLM.

4. RESULTS AND DISCUSSION

The pretest and posttest data for the tauhid scores can be observed in Table. 3.

Table. 3. Descriptive data of the value of monotheism.

Component	Group	*Mean*	*Std. Deviation*
Pretest	Experiment	48.65	14.53
	Control	46.35	11.97
Posttest	Experiment	76.50	9.84
	Control	66.20	11.55

Based on Table 3, it is evident that in the pretest, the mean scores of the experimental and control groups differ $\_X\_C=46.35, \_X\_E=48.65$ with standard deviations of $\_S\_C=11.97, \_S\_E=14.53$, respectively. On the other hand, in the posttest, the mean scores of the experimental and control groups are $\_X\_C=66.20, \_X\_E=76.50$, with standard deviations of $\_S\_C=11.55 , \_S\_E=9.84$. The standard deviation values in both groups indicate a variation in tauhid score improvement, signifying that some subjects experienced minimal improvement while others experienced significant improvement.

Next, the data obtained were analyzed using a GLM Mixed Design. Before conducting the analysis with the GLM Mixed Design, the data were first subjected to tests for normality using the Shapiro-Wilk test and homogeneity using Levene's Test at a 5% significance level. The results of the normality test for the electrical circuit interpretation test data can be found in Table.4.

Jurnal MUDARRISUNA: Media Kajian Pendidikan Agama Islam
Vol. 15, No. 2, April-Juni 2025
ISSN 2089-5127 (print) | ISSN 2460-0733 (online)

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Table.4. Data Normality Test Results

Component	*Shapiro-Wilk*		
	Statistic	*df*	*sig*
Pretest	0.962	40	0.190
Postest	0.962	40	0.189

Based on Table 4, we can observe that the sig values for both groups are greater than 0.05 (p>0.05), thus allowing us to conclude that the data follows a normal distribution. The results of the data homogeneity test based on Levene's test can be found in Table 5.

Table 5. Results of Data Homogeneity Test

Component	Levene Statistic	Sig
Pretest	0.899	0.349
Postest	0.474	0.495

Based on Table 5, the results indicate that the sig values for both groups are p>0.05, suggesting that the data variances of both groups are equal. When the data has been confirmed as normal and homogeneous, the next analysis will involve using the GLM mixed design. The purpose of using the GLM mixed design test is to examine two hypotheses: (1) to determine the interaction between pretest-posttest and experimental-control groups, and (2) to assess the significance of changes in pretest-posttest scores between the experimental and control groups at a 5% significance level.

To assess the interaction between pretest-posttest and experimental-control groups, the results can be observed in the output data of the Test of Within-Subjects Effect in the ANOVA mixed design, as shown in Table. 6.

Table 6. Test of Within-Subjects Effect

Source		Type III Sum of Squares	Df	Mean Square	F	Sig	Partial Eta Squared
time*group	Greenhouse-Geisser	458.017	1.563	293.02	3.492	0.048	0.084

Based on Table 6, the sig value is < 0.05, indicating that there is an interaction between time (pretest-posttest) and group (experimental-control). This interaction suggests that the changes in pretest-posttest scores in both groups are significantly different. To determine the significance of changes in

Jurnal MUDARRISUNA: Media Kajian Pendidikan Agama Islam
Vol. 15, No. 2, April-Juni 2025
ISSN 2089-5127 (print) | ISSN 2460-0733 (online)

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pretest-posttest scores between the experimental and control groups, we can refer to the results in the output data of Pairwise Comparisons in the ANOVA mixed design, as presented in Table 7.

Table 7. Pairwise Comparisons

Group	(I) time	(J) time	Mean Difference (I-J)	Std. Error	Sig	95% Confidence Interval for Difference	
						Lower Bound	Upper Bound
Control	Pretest	Postest	-19.850	1.987	0.000	-23.871	-15.829
	Postest	Pretest	19.850	1.987	0.000	15.829	23.871
Experiment	Pretest	Postest	-27.850	1.987	0.000	-31.871	-23.829
	Postest	Pretest	27.850	1.987	0.000	23.829	31.871

In Table 7, it is evident that the sig value is < 0.05, indicating that the change in pretest-posttest scores in the experimental group is significant (MD = -27.850, p < 0.05), as well as in the control group (MD = -19.850, p < 0.05). These score changes indicate that the MLM can effectively address misconceptual understanding in the subject of tauhid. The extent of the effectiveness provided by the MLM in addressing misconceptual understanding in the subject of tauhid can be observed in the results of the Multivariate Tests in the Partial Eta Squared section, as shown in Table 8.

Table 8. Multivariate Tests

Group		Value	F	Hypothesis df	Error df	Sig	Partial Eta Squared
Experiment	Wilk'S Lambda	0.161	96.132[a]	2.000	37.000	0.000	0.839
Control	Wilk'S Lambda	0.273	49.287[a]	2.000	37.000	0.000	0.727

Table 8 indicates that the extent of effectiveness provided by the MLM in enhance understanding in the subject of tawheed is 0.839, which is equivalent to 83.9%. The interaction that emerges between the experimental and control groups can be observed in the graphical output of Estimated Marginal Means in the GLM Mixed Design, as shown in Figure 1
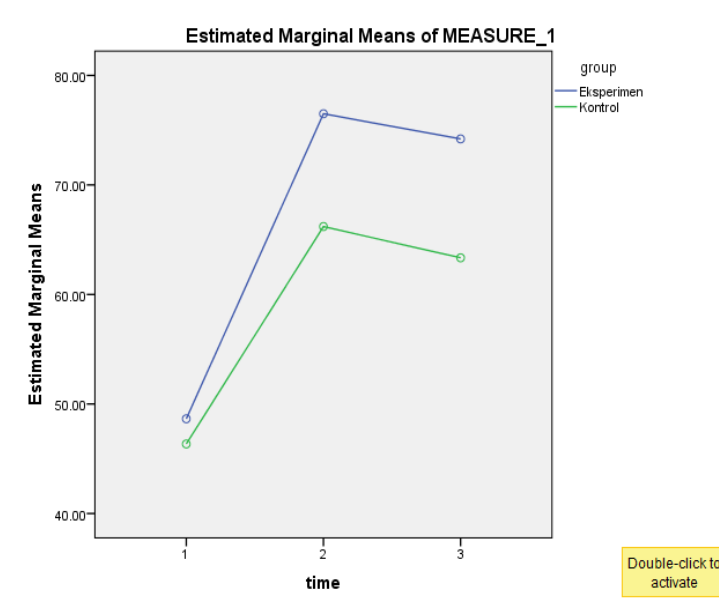
Figure 1. Estimated Marginal Means Output Graph in GLM Mixed Design

Figure 1 demonstrates that the effectiveness of MLM in enhance understanding is greater in the experimental group compared to the control group. The graph also indicates the absence of interaction between the experimental and control groups. The absence of interaction signifies that there is no influence exerted by the control group on the experimental group or vice versa

5. CONCLUSION

The conclusion from this research is that the change in pretest-posttest scores in the experimental group is significant, with a Mean Difference (MD) of -27.850, as well as in the control group with a Mean Difference (MD) of -19.850. These score changes indicate that the MLM can enhance the understanding of tauhid. The magnitude of the effectiveness provided by the Multimedia Learning Module in improving students' understanding of tauhid is 0.839, or 83.9%.

This research can serve as a reference for other studies aimed at addressing misconceptual understanding in the subject of tauhid. Additionally, there is a need for further development of Multimedia Learning Modules for all religious subjects to enhance learning outcomes and address misconceptual understanding.

6. ACKNOWLEDGMENT

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