

Utilization of Android-Based Myting Program in Improving MYOB Accounting Learning Outcomes for Students at SMK Muhammadiyah 04 Medan

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Abstract

The purpose of this study was to determine the use of Myting Program can improve the learning outcomes of students of SMK Muhammadiyah 04 Medan and to determine the improvement of learning outcomes after using Myting Program in students of SMK Muhammadiyah 04 Medan. The approach in this study using quantitative research and this research uses the type of experimental research, research design with Quasi Experimental Design type Nonequivalent Control Group Design. Samples taken 2 classes which

The samples taken were 2 classes which were divided into two groups, namely class XI AKL 1 as a control group with a total of 38 students and an experimental group of class XI AKL 2 with a total of 36 students. The results showed that the results of the Wilcoxon test conducted in the experimental class and control class were 0.000. This means that there is a difference between the pre-test and post-test scores in the experimental and control classes, which is smaller than Sig. $\alpha = 0.05$ ($0.00 < 0.05$).

Hypothesis testing in this study used the Mann-Whitney test with the value obtained that Zhitung was -5,254 with a Sig value of 0.000. The significance value is smaller than 0.05 so that based on the decision-making criteria H_a is accepted. This shows that the average increase in MYOB Accounting learning outcomes of experimental class students is greater than the control class. So the result is that there is an increase in student learning outcomes after using the Android-based Myting program. Android-based Myting program for students at MK Muhammadiyah 04 Medan.

Keywords: Myting Program, Android, Learning Outcomes

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1. INTRODUCTION

The survey results of the Indonesian Internet Service Providers Association (APJII) in 2022 showed that the highest internet penetration rate was in the age group of 13-18 years (Gen Z), namely 99.16%. Hastini et al. (2020) stated that generation Z, born between 1995 and 2012, did not have time to experience life without technology and the internet. The existence of technology and the internet is an important element of their life and daily life. For Generation Z, technology and the internet are something that must exist, not an innovation like the views of other generations. Generation Z is very familiar with social media. Palley's research (Turner, 2015) shows that 60% of Generation Z respondents start their social life online, 50% of Generation Z prefer to communicate online rather than talking directly in real life, even 70% of Generation Z is more comfortable communicating with their friends online. This generation is accustomed to utilizing technological advances in starting everything. The influence that

definitely has a lot of impact on Generation Z is definitely on the learning side. This generation was indeed born in an era of technological advancement, very adept at utilizing technology in accessing information and using it as learning material (Nasution, 2020).

This represents an opportunity to adopt practical technology in learning media. The use of learning media is an integral part of the learning methods used. Learning media helps the student learning process, and teachers as facilitators must be able to convey material well through various media. Technology adaptation, including the development of Android-based methods and media, will facilitate the learning process at all levels of education, especially in vocational schools. Vocational students who are expected to work directly and have skills in accordance with the business world require the learning process to be adapted to the real work environment, this allows students to be able to adjust to the current work environment which increasingly requires mastery of the use of increasingly sophisticated technology. Now, in the learning process, vocational students, especially in the accounting department, are required to be able to operate accounting computers. In fact, during the skills competency exam in the accounting department, it has now led to the use of accounting applications to measure the achievement of student competencies before graduating at the SMK level (Rohmah, et al, 2019). One of the applications used among vocational students majoring in accounting is the MYOB Accounting application. MYOB Accounting comes from the word Mind Your Own Business is an accounting software or computer program package that is made in an integrated software. This program was created by MYOB Limited Australia which has been used and developed in several countries. This accounting program is designed to make it easier to do accounting that has been done manually (Prihantoro & Sutarmi, 2018).

Researchers conducted interviews and written questionnaires in class XI AKL-1 and XI AKL-2 SMK Muhammadiyah 04 Medan, found the fact that the learning process of computer accounting media used is power point with direct explanation done by the teacher. The survey results through google form filled by 57 students, as many as 75% claimed to have difficulty in learning MYOB Accounting. As many as 56% of students admitted that the factor that caused it was the limited time to understand the material stages in operating MYOB Accounting. The above problems have an impact on learning outcomes, this can be seen from the data obtained from the school.

Table 1. Learning Outcomes of XI AKL 1 and XI AKL 2 SMK Muhammadiyah 04 Medan Academic Year of 2022/2023

Class	Number of Students	Score Range	Percentage	Description
XI AKL 1	9	≥80	12%	Above KKM
	27	≤80	36%	Below KKM
XI AKL 2	11	≥80	15%	Above KKM
	28	≤80	37%	Below KKM
Jumlah	75 Siswa		100%	

Source: Accounting Computer Subject Teacher Grade List

There are still many students at SMK Muhammadiyah 04 Medan whose learning outcomes are not good, so they need improvement. They need media that can help teachers increase student participation and can be used at any time without the limitations of lesson time at school. Therefore, the researcher chose SMK Muhammadiyah 04 Medan to test the Myting application, an Android-based program created by students funding Dikristek Kemdikbud in 2021. Myting is designed to help students who have difficulty operating MYOB Accounting.

This application provides a tutorial on the practical steps of preparing financial statements with MYOB Accounting. Features in this application include: 1) Home which introduces the application, advantages, and user testimonials; 2) Course with learning videos; 3) Quiz to measure understanding; 4) Playground to work on case problems; 5) E-book with narrative steps; 6) Podcast about the Indonesian economy; and 7) About with admin contact for help.

Some studies that examine tutorial media such as: (1) Roni Priyanda about the Effectiveness of Using Mathematics Learning Media Using CAI Media with Tutorial Type on Student Learning Outcomes of SMK Muhammadiyah 9 Medan, that after getting Before the action obtained the average value on the pretest of students in class X Audio video is 63.00 with classical learning completeness 33.33%, after the implementation of learning by using learning media obtained the average value of students on the posttest is 81.00 with classical learning completeness 90% (Priyanda, 2019). (2) Dian Rudiawan, Ida Hamidah, Mumu Komaro about the Effect of Tutorial Model Multimedia on Learning Outcomes of 3-Dimensional Drawing of Vocational Students, that using tutorial media can provide an increase in learning outcomes (Rudiawan et al., 2015). (3) Ketut Sepdyana Kartini and I Nyoman Tri Anindia Putra about the Effect of Using Android-Based Interactive Learning Media on Student Learning Outcomes, that the experimental class with the use of android-based interactive learning media has a significant effect on the results (Kartini & Putra, 2020). (4) Otong Hidayat about the Effect of MYOB Video Tutorial Learning Media and Learning Independence on Learning Outcomes, that the learning outcomes of students who use MYOB video tutorial media are higher, (Hidayat, 2020).

Based on the explanation above, it is believed that Andorid-based tutorial learning media is expected to make it easier for students to be independent in learning and improve learning outcomes, as well as provide new media for teachers to teach MYOB Accounting.

2. METHODOLOGY

The approach in this study was to use quantitative research and this study used experimental research. In experimental research there is treatment treatment, thus the type of experimental research can be interpreted as a type of research used to seek the effect of certain treatments on others under controlled conditions (Sugiyono, 2017).

Research design with Quasi Experimental Design which has two forms, namely Time Series Design and Nonequivalent Control Group Design. The design used in this study is Nonequivalent Control Group Design. In this study the subjects were not randomly selected, which involved two groups, namely the experimental group and the control group. The experimental class was given treatment using Myting media, while the control class was not given Myting media treatment. The data analysis technique used in this research is inferential statistics. According to Sugiyono (2017) Inferential statistics are statistics used to analyze data where researchers want to make conclusions that apply to the population.

1. Analysis of Learning Outcomes

Before analyzing the hypothesis testing data, the prerequisite analysis is carried out first, namely:

a. Normality Test

Data is used to determine whether the final data of the sample class is normally distributed or not. To test the normality of the data can use the Kolmogorov-Smirnov test. In this study, the data normality test was carried out with the help of SPSS (Statistical Product and Service Solution) 16.0 for Window. The criteria for testing normality with SPSS are said to be normal if $Asymp.sig (2-tailed) > 0.05$.

b. Hypothesis Test

Hypothesis testing is carried out to determine the hypothesis that has been proposed is processed or accepted. Hypothesis testing in this study used an independent sample t-test. To facilitate research, researchers used the help of SPSS (Statistical Product and Service Solution) 16.0 for Windows. In this study, researchers used the t-test to determine whether there was a significant influence between Myting Media (X) on student learning outcomes (Y).

2. Data Analysis Of Questionnaire Results

The questionnaire uses alternative answers, Very Suitable, Suitable, Less Suitable, Not Suitable. The learning attitude questionnaire is filled in by the students themselves, so the questionnaire uses a Likert scale of 1- 4. This is made to avoid hesitation.

3. RESULT

a. Normality Test

After conducting the pre-test and post-test of each research class both Experiment and Control classes, the next step is to test the normality of the pre-test and post-test values. The data normality test for the Experiment class and Control class was carried out to test whether the data distribution of the pre-test and post-test results was normally distributed or not. The data normality test was carried out with the help of SPSS software version 22 for windows using the Kolmogorov-Smirnov test which aims to determine the alignment or suitability of the data with a normal distribution or not. The test significance rate is $\alpha = 0.05$. The criterion is if the significance obtained is $>\alpha$, then the distribution is normal. But if the obtained $<\alpha$, then the data is not normally distributed. If the data is normally distributed, it will continue with the homogeneity test and t-test. However, if the data is not normally distributed, the data analysis will continue with the Wilcoxon test and the Mann Whitney test. The results of the Kolmogorov-Smirnov normality test for pre-test and post-test data can be seen in the table below:

Table 2. Normality Test Result

Class		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
MYOB Learning Outcomes	Pre-Test Experiment (Myting)	.157	35	0.30	.941	35	0.62
	Post-Test Experiment (Myting)	.252	35	.000	.796	35	0.000
	Pre-Test Control (Conventional)	.178	38	0.004	.923	38	0.12
	Post-Test Control (Conventional)	.392	38	0.000	.625	38	.000

Source: Data processing with SPSS version 22

The results of the table above show that the results of the experimental class pre test $0.30 > 0.05$, experimental class post test $0 < 0.05$. While the control class pre test $0.004 < 0.05$, the control class post test $0 < 0.05$. This shows that the data is not normally distributed, because the results of the experimental class post test $<$ from the Sig α value ($0 < 0.05$), the

results of the control class pre test $<$ from the Sig α value ($0.004 < 0.05$), and the results of the control class post test $<$ from the Sig α value ($0 < 0.05$).

b. Wilcoxon Test

The Wilcoxon test is used to test whether there is a difference in two interconnected samples. The samples here that are tested are the results of the pre test and post test of the Experiment class and the pre test and post test of the Control class. If the result is $< \alpha$ (0.05) then there is a difference between the pre-test and post-test values and vice versa if the result is $> \alpha$ (0.05) then there is no difference between the pre-test and post-test values. The results of the wilcoxon test calculations carried out are as follows:

Table 3. Wilcoxon Test Results of Experimental and Control Classes
Test Statistics^a

	Post-Tes Experiment - Pre-Test Experiment	Post-Test Control-Pre- Test Control
Z	-4.962 ^b	-5.211 ^b
Asymp. Sig. (2-tailed)	.000	.000

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

Source: Data processing with SPSS version 22

The table above shows that the Wilcoxon test result conducted in the experimental class and control class is 0.000. This means that there is a difference between the pre-test and post-test scores in the experimental and control classes, which is smaller than Sig. $\alpha = 0.05$ ($0.00 < 0.05$).

c. Mann-Whitney Test

After testing the normality of the pre-test and post-test results in the Experiment class and Control class, the result that one of the samples is not normally distributed. So that in the hypothesis test to determine whether there is an effect of the Myting program on the learning outcomes of MYOB Accounting class XI AKL students at SMK Muhammadiyah 04 Medan is to use the Mann-Whitney test. This Mann-Whitney test was conducted using the help of SPSS software version 22 for windows by taking a significance level of 0.05. The hypothesis to be tested is as follows:

Ha: There is an increase in student learning outcomes after using the Android-based Myting program for students at SMK Muhammadiyah 04 Medan.

Ho: There is no improvement in student learning outcomes after the use of the Android based Myting program for students at SMK Muhammadiyah 04 Medan.

The conclusion criteria for the test are:

1. If the Significance value (Sig.) < 0.05 , then Ha is accepted.
2. If the Significance value (Sig.) > 0.05 , then Ha is rejected.

Table 4. Mann-Whitney Test Results

	MYOB Accounting Learning Outcomes
Mann-Whitney U	203.500
Wilcoxon W	944.50
Z	-5.254
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Class

Source: Data processing with SPSS version 22

From the table above, it is obtained that Zhitung is -5,254 with a Sig value of 0.000. The significance value is smaller than 0.05 so that based on the decision-making criteria H_a is accepted. This shows that the average increase in MYOB Accounting learning outcomes of experimental class students is greater than the control class. So the result is that there is an increase in student learning outcomes after using the Android-based Myting program for students at SMK Muhammadiyah 04 Medan.

4. DISCUSSION

This research was conducted at SMK Muhammadiyah 04 Medan by involving 2 class groups, where one class was used as an experimental class and the other as a control class. For the experimental class, namely class XI AKL 2 which will be given treatment or treatment using the Android-based Myting program learning media, while for the control class, namely class XI AKL 1 using conventional learning media. Based on the results of research conducted in class XI AKL 1 and XI AKL 2, the following results were obtained:

A. Student Learning Outcomes of Experimental Class (XI AKL 2)

The experimental class, namely class XI AKL 2, totaling 35 students, in the learning process was given a treatment treatment using the Android-based Myting program learning media showing that the MYOB Accounting learning outcomes on KD 3.14 analyze the recording of purchase transactions for supplies, merchandise, fixed assets and debt payment transactions in trading companies and KD 4.14 Perform entry transactions for the purchase of supplies, merchandise, fixed assets and debt payment transactions in trading companies are in the category of good learning outcomes. This shows that more students have been able to analyze and enter transactions for the purchase of supplies, merchandise, fixed assets and debt payment transactions in trading companies.

The pre-test results of experimental class students show 100% of students get learning outcomes below the KKM, but after being given treatment using the Android-based Myting program learning media, the post-test results show that 51% or 18 students get scores above the KKM, and as many as 49% or 17 students below the KKM. If the average value of the pre-test results is compared with the average value of the post test, it can be seen that there is a significant increase from 25 to 67. So it can be proven that there is an increase in student learning outcomes after the use of the Android-based Myting program for students at SMK Muhammadiyah 04 Medan.

B. Learning Outcomes of Control Class Students (XI AKL 1)

The experimental class, namely class XI AKL 1, totaling 38 students, in the learning process using conventional learning media shows that the MYOB Accounting learning outcomes on KD 3.14 analyze the recording of purchase transactions for supplies, merchandise, fixed assets and debt payment transactions in trading companies and KD 4.14 Perform entry of purchase transactions for supplies, merchandise, fixed assets and debt payment transactions in trading companies are in the poor category. This shows that there are still many students who have not been able to analyze and enter transactions for the purchase of supplies, merchandise, fixed assets and debt payment transactions in trading companies.

The results of the pre-test and post-test of control class students show 100% of students get learning outcomes below the KKM. If the average value of the pre-test results is compared with the average value of the post test, it can be seen that there is a significant increase from 26 to 45. So it can be proven that there is an increase in student learning outcomes after the use of the Android-based Myting program for students at SMK Muhammadiyah 04 Medan. But when compared to the experimental class, the learning outcomes of the control class are still below because this class only uses conventional learning media, so there are deficiencies that cause the learning outcomes to be below the experimental class.

C. Results of the Student Response Questionnaire to the Android-Based Myting Program Learning Media

The students' response questionnaire to the Android-based Myting Program learning media was distributed to students in class XI AKL 2 or the experimental class. The purpose of distributing this questionnaire is to measure usefulness, excellence. The results are as follows:

Table 5. Results of Student Response Questionnaires to Android-Based Myting Program Learning Media

Aspects	Strongly Agree	Agree	Disagree	Strongly Disagree
Display Aspect	31,4%	62,9%	5,7%	0
Operation Aspect	31%	66%	3%	0
Usefulness Aspect	28,6%	66,9%	2,8%	1,7%

From table 5 above, the results of the respondents' questionnaire filled out by experimental class students show that in terms of display aspects, 31.4% of students strongly agree, 62.9% agree and 5.7% disagree that the video/picture/writing display in the Myting program can be seen clearly. In terms of the operation aspect, 31% of students strongly agree, 66% agree, and 3% disagree that the Myting program is easy to use, the presentation of the material is coherent according to the steps in completing financial reports in MYOB, and the Myting program makes it easy to choose the subject matter in the video tutorial in Myting. In terms of the aspect of usefulness, 28.6% strongly agreed, 66.9% agreed, 2.8% disagreed, and 1.7% strongly disagreed that the Myting Program makes it easier to learn independently in operating MYOB Accounting, the presentation of this video can attract my attention so that it provides stimulation to learn, with the Myting Program makes learning MYOB Accounting anywhere and anytime without being bound by class time, the use of the Myting program increases the enthusiasm for learning, the Myting program adds curiosity to learning MYOB

Accounting, feels more helpful in operating MYOB Accounting by using the Myting Program, the use of the Myting Program can speed up in completing transactions in MYOB Accounting.

D. The Effect of Android-Based Myting Program on MYOB Accounting Learning Outcomes for Students at SMK Muhammadiyah 04 Medan

To see the effect of the Myting program learning media used on MYOB Accounting learning outcomes, the Mann-Whitney test was used. The result is an increase in student learning outcomes after the use of the Android-based Myting program for students at SMK Muhammadiyah 04 Medan. This is evidenced by the Mann-Whitney test results obtained Zhitung of -5,254 with a Sig value of 0.000. The significance value is smaller than 0.05 so that based on the decision-making criteria H_a is accepted. This proves that the average value of MYOB Accounting using the Myting learning media program is better than the average value of MYOB Accounting learning outcomes using conventional learning media. From these results it can be concluded that the Android-based Myting program learning media is effectively applied in learning MYOB Accounting, especially in material entry transactions for purchasing supplies, merchandise, fixed assets and debt payment transactions in trading companies. Because this Android-based Myting program learning media aims to assist teachers in increasing student participation to be active and can be used anywhere and anytime without the limitations of class time at school, and can provide convenience to students in learning MYOB Accounting.

5. CONCLUSION

Based on the research results that have been obtained, as well as the problems that have been formulated, the conclusions are as follows:

1. The learning outcomes of MYOB Accounting class XI AKL 1 SMK Muhammadiyah 04 Medan who used conventional learning media in the control class with a total of 38 students obtained an average value in the pre test of 26, and the average value of the post test of 45.
2. The learning outcomes of MYOB Accounting class XI AKL 2 SMK Muhammadiyah 04 Medan who used the Android-based Myting program learning media in the experimental class with a total of 35 students obtained an average score on the pre test of 25, and an average post test score of 67.
3. The effect of Android-based Myting Program learning media on learning outcomes was tested for data normality, it turned out that in both classes the data obtained were not normal. Therefore, further testing uses the Wilcoxon Test. The result of the Wilcoxon test conducted in the experimental class and control class is 0.000. This means that there is a difference between the pre-test and post-test scores in the experimental and control classes, which is smaller than $\text{Sig.}\alpha = 0.05$ ($0.00 < 0.05$). Hypothesis testing in this study used the Mann-Whitney test with the value obtained that Zhitung was -5,254 with a Sig value of 0.000. The significance value is smaller than 0.05 so that based on the decision-making criteria H_a is accepted. This shows that the average increase in MYOB Accounting learning outcomes of experimental class students is greater than the control class. So the result is that there is an increase in student learning outcomes after using the Android-based Myting program for students at SMK Muhammadiyah 04 Medan.

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