

The Effect of Modular Building Model Learning Media And Student Skills on Learning Outcomes Construction And Property Business Expertise Program at Siwa Lima Vocational School, St Yosep Langgur

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ABSTRACT

Is there any influence of the modular building model learning media and student skills on student learning outcomes at Siwa Lima St Yosep Langgur High School is a question that is the aim of this research.

This study used quantitative methods by collecting data using questionnaires, documentation and tests while analyzing data using multiple regression analysis with the help of the SPSS 24 program.

The results showed that there was a positive and significant relationship between the Modular Building Model Learning Media and Student Skills on the Learning Outcomes of the Construction and Property Business Skills Program at Siwa Lima St. 1 .67943 t table so H_0 is rejected and H_a is accepted, meaning that the more creative the learning media used, the higher the student learning outcomes, there is a positive and significant relationship between student practice and Learning Outcomes of the Construction and Property Business Skills Program at Siwa Lima High School St Yosep Langgur with a t value of the practice intensity variable (X_2) $6.381 \geq 1.67943$ t table so H_0 is rejected and H_a is accepted meaning that the higher the student's practice, the higher the student learning outcomes, there is a positive and significant relationship between Learning Media Modular Building Models and

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Student Skills Against Learning Outcomes in the Construction and Property Business Skills Program in SMA Siwa
Lima St Yosep Langgur and the contribution of the variable Learning Media Modular Building Models and Student

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Skills to Learning Outcomes of the Construction and Property Business Expertise Program at SMA Siwa Lima St Yosep Langgur is 89.7%, while the rest is influenced by other variables that do not become study in research.

Keywords : Media Simulator, Motivation, Results Learn

INTRODUCTION

The education system in Indonesia is always undergoing changes whose aim is to realize a higher quality education system, with a better curriculum to produce better graduates as well. The national education system is explicitly formulated in the Law Republic of Indonesia No. 20 of 2003 concerning the national education system, namely in chapter II article III that "National education functions to develop abilities and shape dignified national character and civilization in the context of educating the nation's life, and aims to develop the potential of students to become human beings who believe and fear to God Almighty, have noble character, be healthy, knowledgeable, capable, creative, independent, and be a democratic and responsible citizen."

Based on preliminary observations, it shows that knowledge of skills in the Practical Competency of students in learning Implementation and Supervision of Building Construction Work for the 2020/2021 school year has not shown a significant increase in practical skills and has not even carried out practical learning at all because face-to-face meetings are not optimal at school. So that students cannot receive practical learning to the fullest and only receive theoretical learning. In this case the author wishes to develop a learning system using interactive media at Siwa Lima Vocational School St Yosep Langgur which can support students' knowledge about skills in the practice of Foundation Work Implementation. Interactions in a learning-based environment generally follow three elements, namely instructional sequences that can be adjusted, answers/responses or student work, and feedback that can be adjusted. Properties with a scale of 1: 1 as learning media can have a positive effect on learning, can improve the quality of learning, and can focus more attention. The use of interactive learning media in the learning process can serve differences in student learning styles.

One of the educational institutions in Indonesia is the Vocational High School (SMK). Along with economic developments that have an impact on the needs of the world of work, vocational education needs to be developed. Vocational education is education that is oriented towards the skills of graduate students who are able to enter the world of work. The skills possessed, of course, must be in accordance with their respective areas of expertise. Skills that must be possessed by SMK graduates, especially Construction and Property Business Competency with an emphasis on psychomotor aspects (work skills) . Construction Implementation and Supervision is one of the subjects that plays an important role in the Competency

Vocational High School curriculum Construction and Property Business Expertise . Foundation work is taught to be able to prepare students in designing and carrying out building construction, the psychomotor aspect (work skills) is said to be successful if student achievement reaches the Minimum Completeness Criteria (KKM) that has been determined.

Based on the results of observations made in the 2019/2020 to 2020/2021 academic year at Siwa Lima St Yosep Langgur Vocational School, evaluation results obtained (from practical test scores) that student achievement in the subject of Implementation and Construction Supervision is still relatively low. This can be proven from student test scores that are still below the Minimum Completeness Criteria (KKM). In this subject, students are required to achieve a KKM score of 72 . However, 60 % of students in the class have not reached the KKM score.

The low learning achievement indicated by student scores that are still below the KKM can be caused by several factors. In general, the factors that affect student learning can be divided into two, namely intrinsic factors (from within the student) and extrinsic factors (from outside the student). Factors that come from within the students such as physical health, interest in learning, intelligence, learning motivation, student talents, cognitive abilities, and students' attitudes towards subjects. While factors that come from outside the student's self such as family, physical and social environment, curriculum, teaching methods, teachers, learning media, facilities and amenities. Therefore, good learning achievement must be supported by good components as well.

One of the external factors that influence learning outcomes is the use of learning media. Learning media is an intermediary used to convey information with the aim of stimulating students to learn. With the existence of learning media , it is hoped that the learning process will be easier for students and teachers, because learning media can overcome the limitations of space and time in learning. The use of learning media can also provide motivation for students to learn. However, during the implementation of learning the use of learning media is still not optimal. This can be seen from the lack of variety of media used by teachers in typing subjects. Teachers are still fixated on the books or modules given to students, so the enthusiasm of students to practice is low.

In addition to external factors that affect learning outcomes there are also internal factors. One of the internal factors that influence student learning outcomes is practical ability . Practice is an encouragement that comes from within or outside a person so that it can lead to learning activities. The role of this practice is very important to encourage students to obtain good achievement results. There is practice students can generate enthusiasm for student learning which in the end will achieve optimal learning results . However, during practical learning each student takes different lessons. There are some students whose enthusiasm for learning is high which is shown by enthusiastic practice well , there are also those who have low practical ability . In addition, there are some students who still think that carrying out construction work and supervision is a difficult subject so that students' motivation to practice is low.

METHOD

The approach used in this research data is a quantitative approach, because the data information obtained is presented in the form of numbers and analyzed using statistical analysis.

According to Sugiyono (2016: 26) the quantitative research method can be interpreted as a method based on the philosophy of positivism, used to research certain populations or samples, sampling techniques are

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generally carried out randomly, data collection uses research instruments, data analysis is quantitative/statistical with the aim of testing the hypothesis that has been set.

Meanwhile, the analysis was carried out through regression analysis and correlation analysis. This analysis was used to test the magnitude of the influence indicated by the correlation coefficient between the variables using learning media (X_1) and student skills (X_2) with student learning outcomes (Y).

The research subjects were students of class XI and XII majoring in Construction and Property Business at SMK Siwa Lima St Yosep Langgur in the academic year 20 22/20 23 . In this study all subjects were used as respondents,

The population in this study were students of class XI and XII majoring in Construction and Property Business at SMK Siwa Lima St Yosep Langgur in the academic year 20 22/20 23 , totaling 64 students.

Table 3.1.

Population Units		
NO	CLASS	TOTAL
1	Class XI (eleven)	34
2	Class XII (twelve)	30
	Amount	64

Source: Administrative Administration of SMK SIWA LIMA ST YOSPE LANGGUR

So the population unit in this study is 64 respondents

Data collection techniques used in this study were questionnaires, tests and documentation "The questionnaire is a list that contains a series of questions regarding a problem to be studied. Questionnaire is a data collection technique that is carried out by giving a set of questions or statements to respondents to answer" (Sugiyono: 2018: 97) This technique is used to obtain information from respondents regarding the learning media used and student learning skills based on the indicators mentioned . The data collection technique was carried out by giving written questions to the respondents to answer . The type of questionnaire used was a closed questionnaire using a Likert scale. Respondents simply chose the answers provided in the questionnaire. In this questionnaire, 4 alternative answers were provided, namely strongly agree, agree, disagree, and don't agree.

Based on these 4 (four) alternative answers, respondents are expected to choose according to their respective circumstances according to what they feel while studying in the Construction and Property Business major.

Documentation techniques are used to obtain data that is already available in the form of notes. This technique is used to collect data on student scores, school profiles, facilities and infrastructure, and the number of students to be studied.

According to Hamza and Satria (2012: 3) in their book entitled Learning Assessment, a test is "a set of tasks that must be done or a number of questions that must be answered by students to measure their level of understanding and mastery of the range of material required and in accordance with certain teaching objectives. ”.

In the context of learning, test-type research instruments are used as a tool to measure learning outcomes. Retrieval of data through this test technique aims to determine the increase in student learning outcomes after the application of learning by using the learning media of the modular building model.

To test the validity of the instrument (questionnaire), it is intended to find out whether the instrument used can reveal the variable data studied correctly. Testing the validity of the Learning Media instrument (X_1), Student Practice (X_2) and Learning Outcomes (Y) using the help of the SPSS 24 application.

According to Sukardi (2008: 12), reliability is "the degree of consistency of the relevant instrument". An instrument is said to have a high reliability value, if the tests made have consistent results in measuring what is to be measured. Data reliability testing in this study used the SPSS 24 application.

RESULTS AND DISCUSSION

learning media variables and student skills were carried out using a questionnaire which was distributed to 64 respondents in class XI and XII BKP Department, SMK Siwa Lima , Southeast Maluku Regency, while student learning outcomes data were obtained from the final semester assessment in the 2022/2023 school year.

Value of $r_{table}(\alpha, n-2)$ from product moment table. In the validity test it is known that $\alpha = 5\%$ and n is 64, namely the number of respondents. Then, $r_{table}(5\% (64-2) = 62 = 0.250$. For each item it can be said to be valid if r_{count} is greater than r_{table} . This validity test is tested separately on each variable , both learning media variables , as well as student skills variables but still using the same analysis and the same r_{table} values , while the learning outcomes variables are not tested for validity because the data is taken directly at the end of the semester assessment results. The following are the results of the validity test:

Table 4.2.

Test the Validity of Learning Media Data
major BKP Siwa Lima Vocational School, St. Yosep Langgur , Southeast Maluku

r Table	r Count	Information
0.250	.605**	Valid
0.250	.490**	Valid
0.250	.731**	Valid
0.250	.676**	Valid

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0.250	.639**	Valid
0.250	.693**	Valid
0.250	.626**	Valid
0.250	.616**	Valid
0.250	.567**	Valid
0.250	.634**	Valid
0.250	.630**	Valid
0.250	.680**	Valid
r Table	r Count	Information
0.250	.424**	Valid
0.250	.605**	Valid
0.250	.490**	Valid
0.250	.731**	Valid
0.250	.676**	Valid
0.250	.639**	Valid
0.250	.693**	Valid
0.250	.683**	Valid
0.250	.616**	Valid
0.250	.567**	Valid
0.250	.634**	Valid
0.250	.630**	Valid
0.250	.680**	Valid

Source: Results of Data Processing with SPSS , 2022

From the results of processing using SPSS 26, it can be explained that item $r_{\text{count}} > r_{\text{table}}$, these results can be stated that all question items in the variable X₁ (Learning Media) are all declared valid. Table 4.3.

Test the Data Validity of Student skills
major BKP Siwa Lima Vocational School, St. Yosep Langgur , Southeast Maluku

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r Table	r Count	Information
0.250	.344**	Valid
0.250	.636**	Valid
0.250	.504**	Valid
0.250	.409**	Valid
0.250	.459**	Valid
0.250	.577**	Valid
0.250	.597**	Valid
0.250	.497**	Valid
0.250	.677**	Valid
0.250	.667**	Valid
0.250	.695**	Valid
r Table	r Count	Information
0.250	.701**	Valid
0.250	.584**	Valid
0.250	.608**	Valid
0.250	.756**	Valid
0.250	.744**	Valid
0.250	.643**	Valid
0.250	.601**	Valid
0.250	.561**	Valid
0.250	.538**	Valid
0.250	.639**	Valid
0.250	.650**	Valid
0.250	.691**	Valid

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0.250	.673**	Valid
0.250	.600**	Valid

Source: Results of Data Processing with SPSS , 2022

Based on the results of processing using SPSS 24, it can be explained that item $r_{count} > r_{table}$, this result can be stated that all question items in the variable X_2 (Student skills) are all declared valid.

To be able to state whether the instrument is reliable or not, it must go through measurements with an alpha value of 0.6. If Crocbach's $\alpha \geq 0.6$ in the instrument it can be reliable.

Testing the reliability of Learning Media data for students of Siwa Lima Vocational School, Southeast Maluku Regency , was carried out using the SPSS 26 application with the following results: Table 4.4.

Learning Media Data Reliability Test

major BKP Siwa Lima Vocational School, St. Yosep Langgur , Southeast Maluku

Reliability Statistics		
Cronbach's Alpha	N of Items	
0.826	25	

Source: Results of Data Processing by Researchers , 2022

Based on the results of the Reliability Test for Learning Media data , a Cronbachs Alpha value of $0.826 \geq 0.6$ is obtained. From these results it can be seen that these results are reliable. So it can be concluded that the data obtained from the learning media questionnaire is reliable data.

Testing the reliability of practice data for students majoring in BKP SMK Siwa Lima , Southeast Maluku Regency was carried out using the help of the SPSS 2 6 application with the following results: Table 4.5.

Student Skills Data Reliability Test

major BKP Siwa Lima Vocational School, St. Yosep Langgur , Southeast Maluku

Reliability Statistics	
Cronbach's Alpha	N of Items
0.887	25

Source: Results of Data Processing by Researchers , 2022

Based on the results of the Reliability Test on student skills data , the Cronbachs Alpha value was $0.887 \geq 0.6$. from these results it can be seen that these results are reliable. So it can be concluded that the data obtained from the practice intensity questionnaire is reliable data .

Testing the normality of the data in this study used the SPSS 26 application with the following results:

Table 4.6.

Influence Data Normality Test Results learning media and skills on student learning outcomes

One-Sample Kolmogorov-Smirnov Test						
		Learning Media	Skills	Learning outcomes		
N		64	64	64		
Normal Parameters a,b	Means		73,91	77,34		
	std. Deviation	5,912	7,519	9,584		
Most Extreme Differences	absolute	0.103	0.109	0.085		
	Positive	0.079	0.109	0.074		
	Negative	-0.103	-0.083	-0.085		
Test Statistics		0.103	0.109	0.085		

Coefficients ^a						
Model				Standardized Coefficients	t	Sig.
				Betas		
1	(Constant)	89,855	19,282		4,660	0.000

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	Learning Media	-0.262	0.204	-0.162	-1,284	0.204
	Skills	0.089	0.161	0.070	0.556	0.581
a. Dependent Variable: Learning Outcomes						
	asympt. Sig. (2-tailed)		087 ^c	.056 ^c	.200 ^{c,d}	
a. Test distribution is Normal.						
b. Calculated from data.						
c. Lilliefors Significance Correction.						
d. This is a lower bound of the true significance.						

Source: Results of Testing Data by Researchers , 2022

Based on the results of the normality test, it can be explained that the significance value is greater than the value of 0.05, both in the test using Kolmogorov, namely the learning media variable is $0.087 \geq 0.05$, the skill variable is $0.119 \geq 0.05$ and learning achievement is $0.056 \geq 0.05$ on the Kolmogorov test Source: Results of Testing Data by Researchers , 2022

Based on the results of the comparison above, it can be concluded that the test data normality test using the Kolmogorov-Smirnov data is normally distributed.

Multiple regression testing was carried out to determine or estimate the magnitude of the influence of each learning media variable (X_1) and skills (X_2) on learning outcomes (Y). Multiple regression testing in this study used the SPSS 26 application with the following test results:

Based on the results of multiple regression testing, the following equation values are obtained:

$$Y = 89.855 + 0.262 X_1 + 0.089 X_2$$

Testing on the t test aims to determine the effect of the partial/alone variable l learning media with the learning outcomes of students majoring in BKP and student skills with the learning achievements of students majoring in BKP at Siwa Lima Vocational School, southeast Maluku district , by comparing the tvalue and t- table values with a significant level (α 5%) with the following hypothesis formula:

Determine H_0 = hypothesis 0 and the alternative hypothesis of influence learning media to student learning outcomes of the construction and property business transfer program at SMK Siwa Lima St Yosep Langgur 1)

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$H_0: H_1 = 0$, meaning that the learning media does not have a positive influence on student learning outcomes of the construction and property business transfer program at SMK Siwa Lima St Yosep Langgur

- 2) $H_a: H_1 \neq 0$, learning media have a positive influence on student learning outcomes of the construction and property business transfer program at SMK Siwa Lima St Yosep Langgur
- 3) Determine $H_0 =$ hypothesis 0 and the alternative hypothesis does not provide influence skills against student learning outcomes business transfer program construction and property of SMK Siwa Lima St Yosep Langgur
- 4) $H_0: H_1 \neq 0$, it means that there is influence skills against student learning outcomes of the construction and property business transfer program at SMK Siwa Lima St Yosep Langgur
- 5) $H_0: H_1 = 0$, meaning it does not give influence learning media and skills towards student learning outcomes business transfer program construction and property of SMK Siwa Lima St Yosep Langgur
- 6) $H_0: H_1 \neq 0$ exists influence learning media and skills towards student learning outcomes business transfer program construction and property of SMK Siwa Lima St Yosep Langgur
- 7) Determine the significant level (α) and t_{table}

The significant level (α) and t_{table} in this study is 5% or 0.05 and the degree of validity (df) = $nk - 1$.

Based on table 1 at $t_{\alpha} = 10\%$ it is known that the value of t_{table} $df = 64 - 2 - 1 = 61 = 1.67022$ (1.67022 is obtained from the t_{table} value on sample df 61 with an accuracy level of 0.05)

- 8) Test criteria

a). Learning Media Variables (X_1)

- 1). If $t_{count} \geq$ from t_{table} then H_0 is rejected, meaning that there is a positive or significant influence between learning media on student learning outcomes of the construction and property business transfer program at SMK Siwa Lima St Yosep Langgur
- 2). If $t_{count} \leq t_{table}$ then H_0 is accepted, meaning that there is no positive or significant influence between learning media on results students of the construction and property business transfer program at SMK Siwa Lima St Yosep Langgur
- b). Skill variable (X_2)
- 1). If $t_{count} \geq$ from t_{table} then H_0 is rejected, meaning that there is a positive or significant influence between skills on student learning outcomes of the construction and property business transfer program at SMK Siwa Lima St Yosep Langgur
- 2). If $t_{count} \leq t_{table}$ then H_0 is accepted meaning that there is no positive or significant effect between skills on student learning outcomes of the construction and property business transfer program at SMK Siwa Lima St Yosep Langgur

Determination test (R^2) is carried out to find the magnitude of the contribution of learning media variables (X_1) to learning outcomes (Y). The determination test in this study used the SPSS 26 application with the following results:

Table 4. 9.

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Determination Test (R^2) The Amount of Learning Media Contribution
Against Learning Outcomes

Summary models				
Model	R	R Square	Adjusted R Square	std. Error of the Estimate
1	.163 _a	0.027	0.011	9,531
a. Predictors: (Constant), Learning Media				

Source: Results of SPSS 26 Data Analysis , By Researchers

The amount of the independent variable's contribution to learning achievement can be determined by the square formula (r^2), with the following formula;

$$KD = R^2 \times 100\%$$

$$KD = 0.163 \times 100\% \text{ KD}$$

$$= 16.3 \%$$

learning media variables to student learning outcomes of the construction and property business transfer program at Siwa Lima SMK St Yosep Langgur Then 16.3%.

Test the coefficient of determination (R^2) skills with learning outcomes

Table 4. 10.
Determination Test (R^2) The Amount of Skills Contribution to Learning Outcomes

Summary models				
Model	R	R Square	Adjusted R Square	std. Error of the Estimate
1	.163 _a	0.027	0.011	9,531
a. Predictors: (Constant), Learning Media				

Source: Results of SPSS 26 Data Analysis , By Researchers

Based on the table, it can be explained that the magnitude of the contribution of skills (X_2) to student learning outcomes in the construction and property business transfer program at Siwa Lima Vocational School St Yosep Langgur Then 16.3%. (Using the same formula).

Test (R^2) was conducted to determine the overall contribution of learning media and skills variables to student learning outcomes of the construction and property business transfer program at SMK Siwa Lima St Yosep Langgur . This test was carried out with the help of the SPSS 26 application , with the following results:

Table 4.11.

Determination Test Results (R^2) Learning Media and Skills with Student Learning Outcomes

Summary models				
Model	R	R Square	Adjusted R Square	std. Error of the Estimate
1	.163 ^a	0.027	0.011	9,531
a. Predictors: (Constant), Learning Media				

Source: Data Processing Results, SPSS 26 , By Researchers 2022

Based on the table, it can be concluded that the magnitude of the contribution of learning media and practice variables to student learning outcomes of the construction and property business transfer program at SMK Siwa Lima St Yosep Langgur 16.3%, while the rest is influenced by other variables that are not studied in the study (using the same formula) .

The F test was conducted to determine the overall influence of variables X_1 and X_2 on variable Y. This test was carried out with the help of the SPSS 26 application with the following results:

Table 4.12.

F test results

ANOVA ^a

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Model		Sum of Squares	df	MeanSquare	F	Sig.
1	Regression	182,676	2	91,338	0.994	.376
	residual	5603,761	61	91,865		
	Total	5786,438	63			
a. Dependent Variable: Learning Outcomes						
b. Predictors: (Constant), Skills, Learning Media						

Source: Data Processing Results , 2022

Based on the table , it can be explained that the overall test SPSS output results give an F value count $0.994 \geq F_{table} 0.000$ then H_0 is rejected and H_a is accepted. From these results it can be concluded that learning media and student skills as a whole or jointly have a positive or significant influence on student learning outcomes of the construction and property business transfer program at SMK Siwa Lima St Yosep Langgur

This research is a quantitative research with the aim to find out the influence of modular building model learning media and student skills on student learning outcomes in the construction and property business transfer program at SMA Siwa Lima St. Yosep Langgur . The research departs from the problems found by researchers in research locations in the form of a lack of learning media that use modular building models and also a lack of student skills so according to researchers, this is very important to research. In collecting data, researchers used observation, questionnaire and documentation methods. Of the various problems found by researchers then researchers formulate the problem.

In this section of the discussion will be built based on the hypothesis, namely:

- 1) there is no significant effect between learning media and students' skills to student learning outcomes of the construction and property business transfer program at SMK Siwa Lima St Yosep Langgur and
- 2) there is a significant influence between learning media and students' skills to student learning outcomes of the construction and property business transfer program at SMK Siwa Lima St Yosep Langgur both individually and collectively.

In addition to discussing the hypothesis, in this discussion the researcher also tries to elaborate on the results of the research with theory and facts field as well as previous research so that research results become stronger in terms of proof.

In this study it pays close attention to the level of accuracy as in testing requirements analysis conducting validity testing to find out whether the instrument used is valid or not in capturing data and conducting reliability testing to find out and ensure the data is truly reliable , in data processing the researcher uses the help of the SPSS application 26.

Based on these matters, the results of this study can be discussed as follows:

1. Influence Learning Media Against Student Learning Outcomes

The results of this study indicate that learning media has a positive or significant influence on learning student learning outcomes of the construction and property business transfer program at Siwa Lima SMK St Yosep Langgur . It can be proven that from the test results the t value of the learning media variable (X_1) $2.279 \geq 1.67943$ t_{table} so H_0 is rejected and H_a is accepted. These results indicate that learning media has a positive and significant influence on student achievement in the construction and property business transfer program at SMK Siwa Lima St Yosep Langgur . Then it can be stated with an error rate of 0.05 it is found that the higher the learning media used , the higher the student learning outcomes and conversely that the lower the learning media used , the lower the student learning outcomes of the construction and property business transfer program at SMK Siwa Lima St. Joseph Langgur . The magnitude of the contribution of independent learning to student achievement is 12%. The results of this study are supported by previous research, namely research conducted by Tri Kurniawati (2013) Accounting Education with the title "The Influence of Using Learning Media and Learning Motivation in Accounting on Accounting Learning Outcomes of Class XI Students of Social Sciences Program at SMA Negeri 1 Pleret Academic Year 2012/2013". .

From the various facts obtained and supported by previous research, it further strengthens the truth of the results of this study which states that there is a positive and significant influence on the learning media used to student learning outcomes of the construction and property business transfer program at SMK Siwa Lima St Yosep Langgur

2. Influence Student Skills To Student Learning Outcomes

The importance of direct experience to the learning process is expressed by Hadisuwono in his blog quoted from Kolb and Wallace. Kolb said that adult learning will be more effective if learning is more directly involved than just passively receiving from the teacher. Kolb with his experiential learning theory describes ideas from experience and reflection

The results of this study indicate that there is a positive and significant influence between students' skills to Student achievement of the construction and property business transfer program at Siwa Lima SMK St Yosep Langgur . It can be proven that the t value of the student's skill variable (X_2) $6.381 \geq 1.67943$ t_{table} so H_0 is rejected and H_a is accepted. These results indicate that student skills have a positive and significant influence on student learning outcomes of the construction and property business transfer program at SMK Siwa Lima St Yosep Langgur . Then it can be stated with an error rate of 0.05 it is found that the higher the student's skills , the higher the student learning outcomes and conversely that the lower the student's skills , the lower the student learning outcomes in the construction and property business transfer program at SMK Siwa Lima St Yosep Langgur . The magnitude of the contribution of the practice intensity variable to learning achievement was 89.6 %.

3. The Relationship between Modular Building Model Learning Media and Student Skills on Student Learning Outcomes

The Effect Of Modular Building Model Learning Media And Student Skills On Learning Outcomes
Construction And Property Business Expertise Program At Siwa Lima Vocational School, St Yosep Langgur
John Paul Namsa1, Detsie Daud2, Rolly Robert Oroh3, Parambelem TD Rompas 4

The results of this study indicate that the learning media of the modular building model and students' skills have an influence on student learning outcomes in the construction and property business transfer program at SMA Siwa Lima St. Yosep Langgur . This can be proven by the results of the study that the calculated value of the Hypothesis test (F test) is less than 0.05 ($0.000 < 0.05$) . -both have a positive or significant influence on d student learning outcomes of construction and property business transfer programs at SMA Siwa Lima St. Yosep Langgur

The magnitude of the variable contribution of learning media and student practice to the learning outcomes of the construction and property business transfer program at SMA Siwa Lima St Yosep Langgur is 89.7%, while the rest is influenced by other variables that were not studied in the study.

CONCLUSION

There is a positive and significant influence between learning media of modular building models and student skills on student learning outcomes in the construction and property business transfer program at Siwa Lima St Yosep Langgur Vocational School with the tcount value of practice intensity variable (X_2) $6.381 \geq 1.67943$ ttable so H_0 is rejected and H_a is accepted, meaning that the higher the student's skills, the higher the student learning outcomes and the contribution of student skills is 89.6%, while the rest is influenced by other variables that are not studied in research.

REFERENCES

- Alaudin, EY, Rohmadi, M. Mukhlis., & Yuliani, H. (2020). Development of Animation Media Using Adobe Flash CS6 for Static Fluid Learning in High School . Proceedings of the National Seminar on Physics Education FITK UNSIQ 2020, 6-13.
- Ali, M, (2005) . Development of computer-assisted learning materials to facilitate independent learning in training courses on the application of the basic concepts of electricity and electronics in Vocational High Schools . Research report Research Grant PHK A2 Department of Electronics Engineering Education. FT UNY
- Arief S. Sadiman (2006) . Media education: understanding, development, and utilization . Depok: PT Rajagrafindo Persada 2015
- Arief S. Sadiman, et al, (2006) . Media Education: Definition, Development and Utilization . Jakarta: Rajawali Press, 2012
- Arikunto, (2013). Research Procedures A Practice Approach . Jakarta: Rikenka Cipta
- Arshad. (2011). Learning Media. Jakarta: PT RajaGrafindo Persada.
- Azhar Arsyad, (2006). Learning Media . Jakarta: Raja G Rafindo Persada, 2006
- Bretz , (1996). Abk Learning Media Development - UPI File Directory

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Ministry of National Education. (2003) . Republic of Indonesia Law No.20 of 2003. About the National
Education System .
- Dimiyati and Mudjiono, (1999) . Learning and Learning . Jakarta: Earth Script 2008
- Director General of Basic Education. (2017). Decree of the Director General of Elementary and Secondary
Education, Number: 130/D/KEP/KR/201 dated 10 February 2017 concerning the Structure of the
Vocational Secondary Education Curriculum .
- Hamalik, 2008 . Teaching and Learning Process in Jakarta : Bumi Aksara, 2010
- Hamza and Nina, (2011) . Learning Design : Essential Reference for Teachers, Lecturers, Students, Course
Tutors, and Trainers Training Book
- Hamza and Nina, (2011) . Become a Professional PTK Researcher .Bumi Aksara,
- Hesler, 1990. Application of Modular Technology in Design Concepts Vol. 6, No. 2, December 2021, pISSN
2527-2853, eISSN 2549-2985
- Hearne, L., & Neary, S. (2020). Let's talk about career guidance in secondary schools! A consideration of
the professional capital of school staff in Ireland and England . International Journal for Educational
and Vocational Guidance, 0123456789.
- Hidayat, S. (2013) . New Curriculum Development , Bandung: PT. Youth Rosda Karya.
- Joko M, (2006). Learning Style Makes Smarter . Yogyakarta: Pine
- Kalangi, WD (2015). Application of Competency-Based Curriculum as Entrepreneurial Potential Graduates
of the PKK Department in the Field of Fashion . Management Information Systems Seminar Paper, 2,
549–554.
- Ministry of Education and Culture. (2013). Minister of Education and Culture No. 64 of 2013 concerning
Content Standards for Elementary and Secondary Education . Jakarta: Ministry of Education and
Culture.
- Ministry of Education and Culture (Ministry of Education and Culture), Directorate General of Elementary
and Secondary Education, Directorate of Vocational High School Development. (2016). Vocational
Education Revitalization . Jakarta.
- Masril, M., & Jalinus, N. (2020). Implementation of Problem-Based Learning in the 2013 Curriculum at
SMK N 2 Padang . Journal of Education and Learning, 12(January), 12–25.
- Mukhlason, A., Winanti, T., & Yundra, E. (2020). Analysis of Indicators of Vocational Schools Contributing
to Unemployment in East Java Province . Journal of Vocational and Technical Education (JVTE), 2(2),
29–36.
- Nana Sudjana and Ahmad Rivai, (2002). Teaching Media , Publisher: Bandung : New Light, 2002
- Sadiman, (1996) . EDUCATIONAL MEDIA Definition, Development, and Utilization . Jakarta: CV. Eagle,
1990

- Sudjana, Nana. (2005). *Assessment of Teaching and Learning Process Results* , Bandung: PT Remaja Rosdikarya
- Sugiyono. (2014). *Educational Research Methods Quantitative, Qualitative and R&D Approaches* . Bandung: Alfabet.
- Sugiyono. (2010) . *Qualitative Quantitative Research Methods and R&D* . Bandung: Alfabet Publishers.
- Surayya, (2012) . *The Effect of the Think Pair Share Learning Model on Science Learning Outcomes in View of Students' Critical Thinking Skills* . Ganesha University of Education Postgraduate Program e-journal.
4. <http://pasca.undiksha.ac.id> accessed on 10 October 2022 at 02.10
- Kelvin, (2007) . *Learning Management* ; Salatiga: Stain Salatiga Press, 2007
- Sukman, (2012) . *Development of Learning Media* Published: PGSD Study Program, FKIP, Muria Kudus University, 2011.
- Suranto, (2005) . *Communication Principles for Improving Organizational Performance*
<https://opac.perpusnas.go.id/DetailOpac.aspx?id=1192992>
- Sutirman, (2013) . *Media and Innovative Learning Models First Edition* – Yogyakarta; Graha Science, 2013.
- Sucardi , (2008) . *Educational Research Methodology, Competence and Practice* . Jakarta : PT. Script Earth
- Tatum, (1987). *Modular Architecture in Vertical Residential Buildings* , Jakarta, Architecture UMJ Press 2022
- Omar, (2013) . *EDUCATIONAL MEDIA: Its Role and Function in Learning* <https://e-journal.metrouniv.ac.id/index.php/tarbawiyah/article/view/364> accessed on 12 October 2022 at 12.30
- Widoyoko. (2012) . *Research Instrument Compilation Techniques* . Yogyakarta: Student Libraries.
- Zulhelmi, Adlim, Mahidin. (2017). *The Effect of Interactive Learning Media on Improving Students' Critical Thinking Skills* . *Journal of Indonesian Science Education*, 05, 01, 72-80.