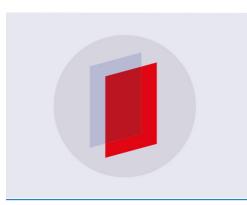
## PAPER • OPEN ACCESS

# The Effect of Learning Media on Progress Quality in Office Administration Program in Vocational School Negeri 1 Watampone Bone Regency

To cite this article: R Niswaty and S H Arhas 2019 J. Phys.: Conf. Ser. 1387 012042

View the article online for updates and enhancements.



# IOP ebooks<sup>™</sup>

Bringing you innovative digital publishing with leading voices to create your essential collection of books in STEM research.

Start exploring the collection - download the first chapter of every title for free.

Journal of Physics: Conference Series

# The Effect of Learning Media on Progress Quality in Office **Administration Program in Vocational School Negeri 1** Watampone Bone Regency

R Niswaty<sup>1</sup>, S H Arhas<sup>2</sup>

<sup>12</sup>UniversitasNegeri Makassar

Abstract. This study aims to describe the use of learning media and the quality of learning in the Office Administration Expertise program of Vocational School Negeri 1 Watampone as well as the influence of learning media on the quality of the teaching-learning process in there. This study uses quantitative research with a population of all students in there totaling 208 students, with a sample of 68 students at a level of error of 10 percent. Data collection is done by using observations and questionnaires. The data analysis technique used is descriptive statistics and inferential statistics. The results of this study indicate that the use of learning media in there is classified as good, in terms of aspects of print media, electronic media, and media reality. The quality of the teaching-learning process in there is considered good in terms of active, innovative, creative, effective and enjoyable learning. There is a significant positive influence on the use of instructional media on the quality of learning in the office administration expertise program of Vocational School Negeri 1 Watampone which is 17.9 percent.

# 1. Introduction

Learning is a teaching process consisting of teachers, students, and learning resources that aim to improve knowledge, skills and behaviors obtained through experience. Learning as a process requires careful and systematic planning. The success of achieving one potential subject depends on several aspects, one aspect that is very influential is how a teacher performs learning [1][2][3][4].

Learning media is a tool used by teachers to deliver teaching material/messages to students [5][6]. Through the use of learning media, it is expected to be able to support the quality of the learning process which in turn can affect the quality of student learning outcomes. The use of media in learning activities is very important, the presence of the media is very helpful in understanding certain concepts, which are not or less able to be explained by language. The quality of the learning process is strongly influenced by the choice of learning strategies and learning media used. Both are related to each other, where the choice of a particular learning strategy will affect the type of media to be used [7][8].

# 2. Method

This research is a type of quantitative research, namely to look for relationships between variables. To obtain the data needed to process data in answering the problems studied in the study, it is necessary to have a population as a research target. According to Sugiyono, population is a generalization region consisting of objects/subjects that have certain quantity and characteristics set by researchers to be studied then conclusions drawn [9]. Based on these opinions, the population in this study were all students of the office administration expertise program of SMK Negeri 1 Watampone, as many as 208 students, while those chosen to be the study sample were 68 students. The data collection techniques



Content from this work may be used under the terms of the Creative Commons Attribution 3.0 licence. Any further distribution of this work must maintain attribution to the author(s) and the title of the work, journal citation and DOI. Published under licence by IOP Publishing Ltd

International Conference on Education, Science	and Technology 2019	IOP Publishing
Journal of Physics: Conference Series	<b>1387</b> (2019) 012042	doi:10.1088/1742-6596/1387/1/012042

used are questionnaires and observations, while the data analysis techniques used are descriptive statistical analysis techniques and inferential analysis.

#### 3. Results of research and discussion

#### 3.1. Research result

To find out how the influence of learning media on the quality of learning in the office administration expertise program of SMK Negeri 1 Watampone, questionnaire instruments were used as data collection techniques. Furthermore, in terms of hypothesis testing, a quantitative test was conducted using Statistical Product Standard Solution 18 (SPSS 18) which was considered relevant for data analysis.

#### 3.1.1. Descriptive Statistics Analysis.

To get an idea of the use of learning media and the quality of learning in the office administration expertise program of SMK Negeri 1 Watampone, then the two variables are made frequency and category tables where both variables are measured using very good, good, good enough, less good, and bad categories given to 68 students who became the study sample. The average score for learning media was 52.3971 with a standard deviation of 6.70518. While the average score for the quality of learning is 60.8971 with a standard deviation of 7.23825. For more details, see Table 1:

No	Class /Interval		Frequency	Category
1	15-26		0	Bad
2	27-38		2	Less Good
3	39-50		23	Good Enough
4	51-62		39	Good
5	63-75		4	Very Good
Total		68		

From the table 1 can be seen that the use of instructional media in there if viewed from the average (mean) is in good category with a frequency of 39. This illustrates that the use of instructional media in there is well reviewed from the indicators of print media, electronic media, and reality media. To find out the picture of the quality of learning in the office administration expertise program of SMK Negeri 1 Watampone, the quality of respondents' answers is also simplified into five categories, namely: very good, good, good enough, less good, and bad categories. More details about the description of the quality of learning in the office administration expertise program of SMK Negeri 1 Watampone, can be seen in Table 2:

No	Class /Interval	Frequency	Category
1	15-26	0	Bad
2	27-38	0	Less Good
3	39-50	6	Good Enough
4	51-62	35	Good
5	63-75	27	Very Good
Total		68	

Based on SPSS 24 data, the average value of the quality of learning is 60.8971 where the average value after being interpreted in table 2 is in the interval 51-62 which means it is in a good category, with a standard deviation of 7.23825. This illustrates that the quality of learning in the office administration expertise program at SMK Negeri 1 Watampone is good, in terms of the average

International Conference on Education, Science a	IOP Publishing	
Journal of Physics: Conference Series	<b>1387</b> (2019) 012042	doi:10.1088/1742-6596/1387/1/012042

(mean) in terms of aspects of active learning, innovative, active, creative, effective and fun with a frequency of 35.

## 3.1.2. Inferential Statistical Analysis

This correlation test aims to find out or test the effect of learning media on the quality of learning in the office administration expertise program of SMK Negeri 1 Watampone. For more details, see Table 3:

 Table 3. Correlation analysis

		Learning Media	Learning Quality
Learning Media	Pearson Correlation	1	.423**
	Sig. (2-tailed)		.000
	Ν	68	68
Learning Quality	Pearson Correlation	.423**	1
	Sig. (2-tailed)	.000	
	Ν	68	68

\*\*. Correlation is significant at the 0.01 level (2-tailed).

The table displays the Pearson Correlation value to find out the magnitude of the relationship between variables. In the table the correlation value is 0.423. This value can be interpreted according to Sugiyono (2010: 257) that the relationship between the two research variables is in the medium category. Simple linear regression analysis is used to measure the strength of the relationship between learning media on the quality of learning in the office administration expertise program of SMK Negeri 1 Watampone Bone. To find out how good the regression model is formed by learning media variables and learning quality variables can be seen in Table 4:

Table 4. Coefficient of determination					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.423ª	.179	.166	6.60904	

a. Predictors: (Constant), Learning Media

The value of R Square or coefficient of determination (CD) shows how good the regression model is formed by learning media and learning quality. The CD value of the table is 0.179 or 17.9 percent which can be interpreted that the learning media variable has an influence of 17.9 percent on the quality of learning and the other 82.1 percent is influenced by other factors outside the learning media. This simple linear regression analysis is used to measure the strength of the relationship between learning media on the quality of learning in the office administration expertise program of SMK Negeri 1 Watampone Bone. Next is to determine the level of significance or linearity of the regression. The criteria can be determined based on the F test. The easiest way to determine significance is when the significance value of SPSS data is smaller than 0.05, then the regression model is linear, and vice versa. To find out the significance value can be seen in Table 5:

International Conference on Education, Science and Technology 2019

IOP Publishing

doi:10.1088/1742-6596/1387/1/012042

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	627.438	1	627.438	14.365	.000ª
	Residual	2882.841	66	43.679		
	Total	3510.279	67		-	-

1387 (2019) 012042

a. Predictors: (Constant), Media Pembelajaran

Journal of Physics: Conference Series

b. Dependent Variable: Kualitaspembelajaran

From the Anova or F Test, the F value is 14,365, which means  $\text{Ha} \neq 0$ , then H0 is rejected with a probability of 0,000, because the probability is much smaller than 0.05, then the regression model is linear meaning it can be used to predict quality of learning. Furthermore, to find out the regression equation model obtained, it can be seen in the Unstandardized Coefficient B column, can be seen in Table 6:

Table 6. Regression equation model

	Model		tandardized pefficients	Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	36.983	6.360		5.815	.000
	Media Pembelajaran	.456	.120	.423	3.790	.000

Based on these tables, the regression equation model:  $\hat{Y} = 36,983 + 0,456X$ , meaning that the quality of learning will increase if, the use of instructional media is getting better, and also in vice versa.

#### **3.2.** Discussion

#### 3.2.1. Instructional Media

The results showed that the learning media in Watampone 1 State Vocational School were in a good category, with a frequency of 39 and an average of 52,3971, in terms of the aspects of print media, electronic media and reality media, which were quite good. The learning media in there can be done well, this is inseparable from the improvement of the quality of teachers with the effort of the school principal to conduct supervision, guidance, and certification programs for teachers in there. Basically the use of media has an important role, the more or varied the learning media used, the students will be motivated to learn. In other words, the better of the quality of learning media will create a good quality of learning. In learning, two very important elements are teaching methods and learning media. These two aspects are related to each other. The choice of one teaching method will certainly affect the type of learning media that is appropriate, although there are still various other aspects that must be considered in choosing media such as conformity with learning objectives, right to support the content of the facts, principles of concept or generalization, practical use and teacher skilled in its use.

#### 3.2.2. Quality of learning

The quality of learning in the office administration expertise program of SMK Negeri 1 Watampone is in a good category with a frequency of 35 with an average of 60.8971 and a standard deviation of 7.23825, this is viewed from active, innovative, creative, effective and enjoyable learning. It will obtain various kinds of knowledge, skills, attitudes that are very much needed in life and both for now and for the future, with various abilities, skills and expertise acquired in education will have implications for their future lives. The quality of learning experienced by students in the office administration expertise program at SMK Negeri 1 Watampone produces changes in the fields of knowledge, skills, and attitudes. The success of achieving competency in learning depends on various

International Conference on Education, Science a	IOP Publishing	
Journal of Physics: Conference Series	<b>1387</b> (2019) 012042	doi:10.1088/1742-6596/1387/1/012042

aspects. One aspect that affects is how a teacher performs learning. In addition, the teacher must understand the characteristics of the material, students and the learning methodology in the learning process, especially related to the selection of learning models.

#### *3.2.3. Effect of Learning Media on the quality of learning*

The results of the study show that the learning media is related to the quality of learning in the office administration expertise program of SMK Negeri 1 Watampone, Bone Regency. The effect of learning media on the quality of learning is 0.423 meaning it is in the medium category. This means there is a positive correlational relationship between learning media and learning quality. Thus, learning media can improve the quality of learning in the office administration expertise program of SMK Negeri 1 Watampone. By that, the more varied the learning media used, the higher of the quality of learning. Using as much learning media as possible and varied in learning will certainly affect the quality of learning media. This is in accordance with the results of research that shows a positive influence between learning media and the quality of learning.

## 4. References

- [1] Avalos B 2011 Teacher professional development in teaching and teacher education over ten years. Teaching and Teacher Education 27 1020
- [2] Borko H 2007 Professional development and teacher learning: mapping the terrain. Educational Researcher. 33 0315
- [3] Darling hammond L, Richardson N 2009 Teacher learning: what matters? Educational Leadership. 66 0110
- [4] Opfer V D, Pedder D 2011 conceptualizing teacher professional learning. Review of Educational Research 81 376407
- [5] Kozma R B. 2008 Learning with media. Review of Educational Research. 61 179211
- [6] Naz A A, Akbar R A 2010 Its importance: some consideration. Journal of Elementary Education 18 3540
- [7] De Vincenzi, A., Garau, A., &Guaglianone, A. (2018). Has the quality of teaching and improved as-learning processes resulted in coordinated by the state implementation of assurance quality? Quality in Higher Education 24 5565
- [8] Yeap B 2008 A new perspective for quality improvement in teaching and learning processes. EDU-COM International Conference 53 583590
- [9] Sugiyono 2010 Educational Research Methods Quantitative, Qualitative and R & D Approaches (Bandung: Alfabeta) p 257