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THE EFFECT OF AUDIO VIDEO ON DEMAND (AVOD) TO INCREASE THE PEDAGOGIC ABILITY OF STUDENTS OF PROSPECTIVE TEACHERS

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ABSTRACT

Science is developing rapidly nowadays and causes information and knowledge from and throughout the world to be more open and spread through the boundaries of distance, place, space and time. An effective and efficient learning process requires teachers with maximum abilities. One of the courses in the entire Faculty of Teacher Training and Education Untag Banyuwangi study program that prepares to become a professional teacher is a learning strategy. In the implementation of the learning process in the subject of learning strategies have been developed Audio Video on Demand (AVOD). The purpose of this study was to determine the effect of AVOD to improve the pedagogical abilities of prospective teacher students in Untag Banyuwangi. The method used is research explanation (explanatory research) which explains the causal relationships between variables through hypothesis testing. The results obtained by implementing AVOD in the eyes of learning strategies in Faculty of Teacher Training and Education Untag Banyuwangi test results Sig (0.00) <0.05 then Ho is rejected, meaning that the ability to think simultaneously influences the ability / value of students. This means that the AVOD learning design influences the pedagogical ability of students who are prospective teachers.

KEYWORDS: AVOD, Pedagogical, Prospective Teachers

INTRODUCTION

Science is developing rapidly nowadays and causes information and knowledge from and throughout the world to be more open and spread through the boundaries of distance, place, space and time. In the development of science and technology, education must be the pioneer by growing learning activities in the learners themselves to be able to develop their ability to find, manage, and evaluate information and knowledge to solve problems. Therefore, in order for students to absorb information and knowledge and the technology they learn, effective and efficient learning processes are needed (Munir, 2009).

The learning process effective and efficient required teachers with full functionality as presented by (Yusutria, 2017) profesionalisme teacher concern globally, because teachers have a duty and a role not only provide informasiinformasi science and technology, but also shaping the attitude and spirit that able to survive in the era of hyper competition. This view is also emphasized which states the teacher is a professional educator with the main task of educating, teaching, guiding, directing,

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training, evaluating, and evaluating students in early childhood education through formal education, basic education and secondary education (Law of the Republic of Indonesia , About Teachers and Lecturers , 2005) . More detailed delivered by professional teacher indicators are the ability to plan teaching and learning programs, master the lesson material, carry out / manage the teaching and learning process, and assess the progress of the teaching and learning process (Kunandar, 2007).

One of the educational institutions that prints professional teachers is the Faculty of Teacher Training and Education (FKIP) of the University of August 17, 1945 (Untag) Banyuwangi which has 3 study programs namely Biology Education Study Program, Historical Education Study Program, and English Education Study Program. One of the courses in the entire FKIP Untag Banyuwangi study program that prepares to become a professional teacher is a learning strategy. In the implementation of the learning process in the subject of learning strategies have been developed Audio Video on Demand (AVOD). With tools AVOD many benefits that can be obtained (Ashaver & Igyuve, 2013) and there is a simulation of how to teach in the classroom and materials that can be used by the student independently through the syntax of beber a pa model or strategy presented (Pradana & Herman, 2019) .

Video on Demand (VoD) has evolved in effective video data access technology (Demetriades, 2003). Based on the International Telecommunication Union (2008) in (Jatikusumo, Chandra, & Mantor, 2013) VoD is a service based on end - user requests that allows users to select and view video content that they want to watch where the end - user can control the temporary request of video content witnessed.

Utilization of VoD in Indonesia is not optimally utilized in the field of education because of inadequate video quality especially on mobile devices (Jatikusumo et al., 2013) . AVOD learning is one of learning active learning where students can mengexplore presented media and on course strategy mmengimplementasikannya pe m belajaran and subjects other assignments to become professional teachers (Pradana & Herman, 2019) . So research is needed to determine the effect of AVOD to improve the pedagogical abilities of prospective teacher students in Untag Banyuwangi.

MATERIALS AND METHODS

Research design

This research is an explanatory research that explains the causal relationship between variables through hypothesis testing. When viewed from the level of exploration included in the research associative level of exploration is to find the presence or absence of influence. The independent variable in this study is the strengthening of thinking (X) and the dependent variable of student ability / grades (Y). The approach used is a quantitative approach. The relationships between variables are as follows:

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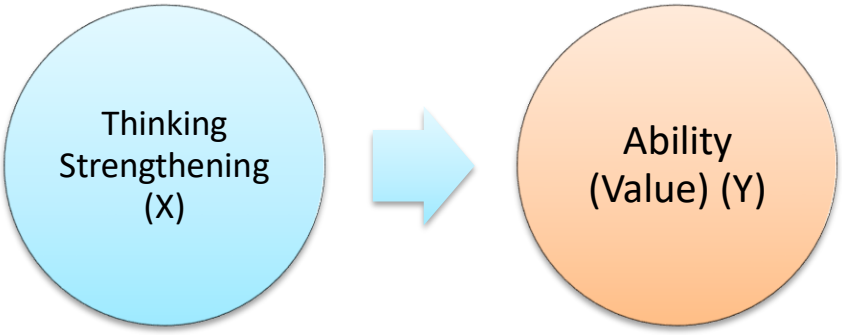

Picture 1. Relationship between Research Variables

Population and sample

The population in this study were all FKIP Untag Banyuwangi students who took a learning strategy course of 54 students. The sample used is a total sampling (census) in which all members of the population are subject to research because the total population is less than 100 students.

Research instrument

The instrument in this study was a questionnaire to calculate reinforcement thinking with a Likert scale, and the value of learning strategy courses with a ratio scale. Data were analyzed with descriptive statistical analysis and statistical analysis of simple linear regression analysis, validity and reliability test, t test, and F test, using SPSS version 20.00.

RESULTS

Descriptive Analysis Results

The results of the descriptive analysis of the measurement of students' thinking abilities taking courses on learning strategies using SPSS 20 are shown in table 1. below:

Table 1 Descriptive analisical results from the measurement of students' thinking abilities.

Descriptive Statistics

	Mean	Std. Deviation	N
Nilai_Y	91,06	4,553	54
Thinking_ability_X	40,76	4,047	54

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Based on table 1 a descriptive statistical group where data was taken 54 times, the average ability / value was 91.06 and the ability to think 40.76

CORRELATION

Table 2. Correlation Results between student ability / value variables (Y) and thinking ability (X).

Correlations

		Nilai_Y	Thinking_ability_X
Pearson Correlation	Value_Y	1,000	,790
	Thinking_ability_X	,790	1,000
Sig. (1-tailed)	Nilai_Y	.	,000
	Thinking_ability_X	,000	.
N	Nilai_Y	54	54
	Thinking_ability_X	54	54

Based on the correlation group table:

1. The correlation between the variable student ability / value (Y) and ability to think (X) is strong that is 0.79
2. The level of significance of the one-tailed (1-tailed) correlation coefficient between the student's ability / value variable (Y) and thinking ability (X) with 0,000 <0.025.

Model summary

Table 3. Summary model results between student ability / grade variables (Y) and thinking ability (X).

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,790[a]	,625	,617	2,817

a. Predictors: (Constant), Thinking_X Ability

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Based on table 3 the results of the model summary between the variable student ability / value (Y) and ability to think (X) R square figure of 0.625 or 62.5% means that the ability / value can be explained by thinking ability of 62.5%. While the remaining 37.5% is explained by other causes.
ANOVA

Table 4. ANOVA results between student ability / grade variables (Y) and thinking ability (X)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	686,226	1	686,226	86,484	,000[b]
	Residual	412,607	52	7,935		
	Total	1098,833	53			

a. Dependent Variable: Value_Y
b. Predictors: (Constant), Thinking_X Ability

Hypothesis
Ho: The ability to think simultaneously does not affect the ability / value of students
H1: The ability to think simultaneously affects the ability / value of students
Testing using one-sided test with a significance level (α) = 5% (Wiyono, 2011).

If Sig < 0.05 then Ho is rejected. Berdas a Refresh Sig test results (0,00) <0.05 then Ho is rejected, artin yes regression model can be used to predict the ability / student grades and ability to think simultaneously affect the ability / grades of students .

Coefficient

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Table 5. Results of the regression equation coefficients between the variable student ability / value (Y) and thinking ability (X)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	54,812	3,916		13,996	,000
	Thinking_ability_X	,889	,096	,790	9,300	,000

a. Dependent Variable: Value_Y

Based on table 5. Results of the regression equation coefficient between the student's ability / value variable (Y) and thinking ability (X) can be described the following regression equation:
Y = 54.18 + 0.889X
Where:
Y = ability / value of students
X = Students' thinking ability

DISCUSSION

The purpose of this study was to determine the effect of AVOD to improve pedagogical abilities of prospective teacher students in Untag Banyuwangi . Based on the results of the model summary results between the variable student ability / value (Y) and ability to think (X) R square figure of 0.625 or 62.5% means that ability / value can be explained by thinking ability of 62.5%. This is in line with (Sagala, 2006) that the professional abilities of teachers affect the quality of teaching and learning. Teachers should be able to use appropriate learning strategies for m eni ngkatkan quality of learning. By implementing AVOD in learning strategy courses, the application of learning strategies through active learning can improve students' abilities / values.

AVOD material is generally used to convey meaning without depending on verbal symbols or language so that reference books, textbooks are not included in the grouping of these teaching materials. The AVOD component can dramaticize events or procedures that require moving materials and equipment (Anzaku, 2011 in (Ashaver & Igyuve, 2013)).

The implementation of AVOD increases the ability / value of students in this case is a pedagogical ability because with AVOD human learning is easier and faster than just verbal explanations. AVOD also contains a presentation of material in the form of multimedia that can be used for student

learning through various types of learning resources, revealing the effectiveness of the use of technology using multimedia programs in the classroom will have a significant impact on improving students' thinking, abilities and skills in problem solving (Santrock, 2011) . Likewise Oketunji (2000) in (Ashaver & Igyuve, 2013) states that AVOD reduces the weaknesses of verbal explanation, enlivens subject matter, provides an interesting new topic approach, time efficiency in learning, and stimulates student initiative. The benefits of research and development such as this is to provide alternatives for teachers to design learning and also for students to provide a variety of alternative learning resources needed, the benefits of this development for teachers are alternative learning activities individually, and provide variations in teaching in the classroom so they can act more efficient because teachers only accompany students (Pradana, Sihkabuden, & Husna, 2016).

AVOD is an important material that is implemented in the teaching and learning process because of the effectiveness of visual material. Visual experience can be up to 40%, 25% on hearing, 17% on smell, 15% on touch, and 3% on taste (Swank, RC, 2011).

CONCLUSION

With the implementation of AVOD in the eyes of learning strategies in FKIP Untag Banyuwangi, the results of the test Sig (0.00) <0.05 then Ho is rejected, meaning that the ability to think simultaneously influences the ability / value of students . This means that the implementation of AVOD learning media can improve pedagogical abilities of students who are prospective teachers.

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