IMPROVING STUDENT'S INDEPENDENCE THROUGH MACROMEDIA FLASH-BASED LEARNING VIDEO Stimulus

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Abstract

This research is motivated by the low level of learning independence of class XI students at SMA Negeri 10 Bandung in learning dance. One of the causes of the lack of a sense of independence in student learning is the lack of stimulus and learning media used by teachers are too monotonous, less innovative so that students become bored during the learning process in class. So that this study aims to apply macromedia flash-based dance learning videos in dance learning as a solution to the problems that occur so that students are able to utilize audio-visual technology as a learning medium to increase the learning independence of class XI students at SMA Negeri 10 Bandung. The method in this study uses quantitative research design, experimental research (quasi-experimental) with the type of method one group pre-test post-test. The instruments used are observation guidelines, questionnaires, interviews. The results of this study using pre-test and post-test can be proven that by applying macromedia flash-based dance learning videos can increase students' independent learning attitudes. The results before the action was carried out were in a less independent position and the results after the implementation of the action were in an independent position. The application of this macromedia flash-based learning video can not only improve independent attitudes in learning but can also improve learning outcomes, so it can be concluded that the application of this macromedia flash-based learning video can increase student learning independence.

Keywords: Independent Learning, Learning Media, Macromedia Flash, Dance Learning

PRELIMINARY

Good learning is the interaction carried out by the teacher as a facilitator and students as objects in the learning process. Optimizing or using learning media as an indicator of success in learning, therefore the use of learning media must be able to convey messages, stimulate students' thoughts, feelings and wills so that they can encourage an effective learning processHamid, M, A (2020). In addition, the use of learning media must be able to encourage students to learn independent, namely students to be active so that the learning process occurs effectively and can produce and achieve learning indicators. However, this is not in accordance with what happened in class XI SMA Negri 10 Bandung, in learning students only listen to the teacher without any response back so that there is no student independence in the learning process. According to Litschenbreg in Oktavera (2015)

suggests that the importance of independent learning is that if a person learns by finding it himself, a tunnel will be left in a person's mind that can be entered again when he needs to get up. The point is that if someone learns independently, the understanding and level of student recall will last longer and affect student learning outcomes. Therefore, there is a need for learning media that can trigger student independence in the learning process,One of the software that can be used as the latest learning media is Macromedia. Macromedia is a superior product of the Adobe system that is used to create vector images and animated images.The use of macromedia as a learning medium is useful for teachers as a tool in preparing teaching materials and organizing learning Masykur, et al., (2017).

Octargia (2020), in the research "Blended Learning with Macromedia Flash to Train Students' Independent Learning"found thatBlended Learning and Macromedia Flash affectstudents' independence in the learning process that has developed after the application of the media.Pramadini. (2019 in research on the Effect of Learning Media and Learning Independence on Science Process Skills in Elementary Schoolsfound that the effect of learning media on students' independence can be seen from the percentage of the turkey test which shows the significance of learning skills.Wijayanto. (2019))researching aboutThe Influence of Learning Media and Learning Independence on High School Students' History Learning OutcomesThis study aims to reveal the effect of learning media and learning independence on learning outcomes. Based on several relevant studies that have been described, this research is a new and different research because this research appliesThe Effect of Application of Macromedia Flash-Based Dance

Learning Videos to Improve Students' Learning Independence.

In this study, various theories were used, namely, learning video media, macromedia flash, basic concepts of student development, independent learning, and the concept of dance learning. Learning media is a set of tools used to support teacher performance in delivering learning materials. According toYusufhadi Miarsso in Nurrita (2018) suggests that learning media are everything that is used to channel messages and can stimulate students' thoughts, feelings, attention, and willingness to learn so that it can encourage a deliberate, purposeful and controlled learning process.In the learning media, it can be in the form of audio, image or video. According toCheppy Riyana (2007) learning video is a learning media in the form of audio-visual which contains learning material both concepts, principles, procedures, knowledge application theory to help facilitate understanding of a material being taught, so it can be said that video learning is a combination of audio and technology. visuals that produce dynamic and interesting impressions. One of the software that can be used as a tool for making teaching materials in learning is macromedia flash which can create various kinds of animation, sound, interactive animation, etc. According to Hotimah, et al., (2021 p.8) suggests that macromedia flash is an animation application software that can be used for the web. Macromedia flash can create web applications that are equipped with a variety of animations, sounds,

(objective condition) The focus of this research is the application of macromedia flash-based learning videos as a stimulus to increase student learning independence. The learning videos in this study use animations contained in macromedia flash to make learning media more

interesting and can increase student learning independence. The use of macromedia in the learning process is because the media is rarely used in learning and not all teachers can apply it. In this era of high technology, students must have an interest in media that they have never met or have never applied in learning at school. Because researchers use macromedia as a medium that can combine sound, images,

This study aims to obtain data and describe the initial conditionsstudents towards learning the art of dance before applying macromedia flash-based learning videos, the dance learning process with the application of macromedia flash-based learning videos and the effect of developing macromedia flash-based dance learning videos on independent learning applied to class XI students at SMA Negeri 10 Bandung

METHOD

This research is included in the type of quantitative research that produces findings that can beby using statistical procedures or other means of quantification or measurement V. Wiratna Sujarweni (2014). This study uses an experimental design with a quantitative approach, the researcher takes a distance from the one being studied, because the relationship that is built is the relationship between the subject and the object, so that it will get a high level of objectivity. The design used in this study is a quasi-experimental design (Quasi Experimental Design) which is the development of an impure experimental design (pre-experimental) because it has a control group but does not fully function to control external variables that affect the implementation of the research. The quasi-experimental form used in this research is One Group Pre-test and Post-test Design.

The population in this studynamely class XI, each class has approximately 30 students. The population is used to determine the research sample according toSugiyono (2016) "Population is a generalization area consisting of: Objects/Subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions.

In this study, the sample was class IX students of Senior High School 10 Bandung City using 2 classes, namely class XI IPA 4 as the experimental class with a total of 34 students and XI IPA 6 as a control class with a total of 36 students.

Techniquedata collection was done by observation, questionnaire (closed), interviews, documentation, and tests. Observations were made by researchers as experimenters to directly observe the learning process before and during the use of macromedia flash. Observation in this study was structured observation with an observation sheet containing the value of student learning activity. In this study using a closed questionnaire containing questions about students' self-confidence during art learning before and after treatment, the questionnaire technique was used to collect research data in the form of questions.according to Sugiyono (2008) a questionnaire is a collection of data that is done by giving questions or written statements to respondents. Interviews in this study used guided interviews by giving structured questions to students and art teachers directly. Documentation in this study is used to obtain data directly in the form of photos, videos in learning activities.

The questionnaire and action test instruments used in this study were validated using Microsoft Excel 2016 and Gregory Formula with a Likert Scale score of 1 to 4(Budiman et al., 2020). The results of the questionnaire validation

show that 36 statements are valid because all r count > r table and the reliability coefficient of the questionnaire instrument lies in the value of 0.970, which is between $0.80 < r_{11} 1.00$ so the instrument is declared to have a very high degree of reliability. The performance test instrument was validated by 2 experts who are competent in the field of motion exploration and creative thinking and produced a coefficient value of 1.0, so the instrument was declared to have a very high degree of validity.

The data analysis used in this research is statistical analysis. Statistical analysis used is descriptive statistics and inferential statistics. Descriptive statistics are used to describe orgives an overview of the object under study through sample data while inferential statistics are used to determine the results obtained from a sample with the results to be obtained in the population as a whole. Descriptive analysis includes mean, median and mode. Inferential data analysis is by performing linear regression test, validity test, reliability test, normality test, homogeneity test, and hypothesis testing and a research conclusion is drawn.

RESULTS

Description of Student Learning Independence Before the Implementation of Macromedia Flash-Based Dance Learning Videos

The initial conditions that occurred before the use of this learning media, the researchers found that during the learning process the teacher only explained the material with the lecture method and gave assignments to students,without any examples of practices that are carried out either directly or through video shows, so that this makes dance learning less attractive to students and makes students experience difficulties in understanding the material provided, both theory and practice.

Furthermore, the researchers conducted a pre-test using a questionnaire to see the level of student independence before the implementation of macromedia flash-based learning video media. From the questionnaire, it was found that student learning independence had not been maximally achieved, this was due to the lack of stimulus from the teacher.

In the experimental class students get the highest scorewhich is 80 and the lowest value obtained is 45, while for the control class they have similarities in that they both have not achieved maximum results and the value obtained is the same as 80 the highest value and 45 the lowest value. From the results of the pre-test of the control class and the experimental class, it can be concluded that the learning of dance at SMA Negeri 10 Bandung is still not optimal. This is caused by the application of learning models and learning media that are used inappropriately, besides the lack of stimulus provided by the teacher also has an impact on the level of student learning independence.
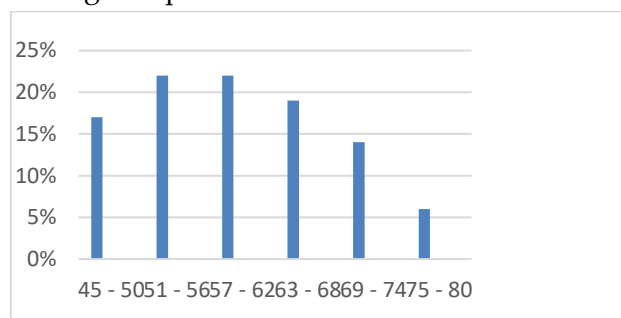

Image 1. Bar ChartPre-test scoresControl Class

Based on the bar chart above shows the results of the control class pre-test, the highest score is 80 and the lowest value is 45, this assessment is an assessment to measure the level of student learning independence in learning dance..
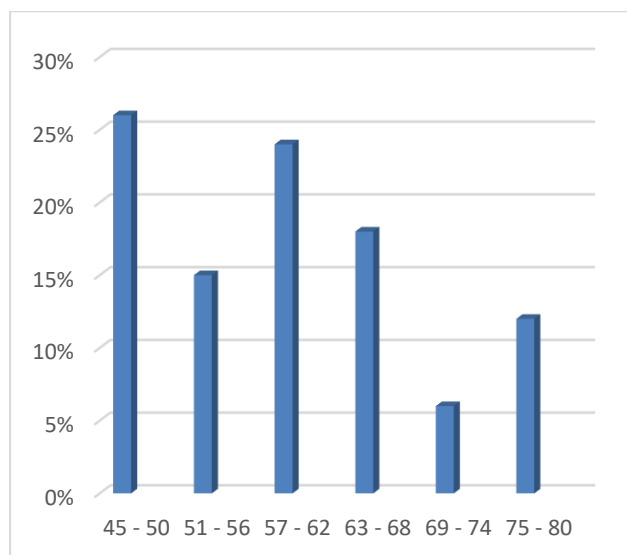
Figure 2. Bar ChartPre-test scoresExperiment Class

Based on the bar chart above shows the results of the pre-test before the implementation of learning using macromedia flash-based learning videos, the highest score was 80 and the lowest score was 45, this assessment is an assessment to measure the level of student learning independence in dance learning.

Dance Learning Process Using Macromedia Flash-Based Learning Videos

In the process of applying macromedia flash-based learning videos, four times with basic dance movements in class XI SMA Negeri 10 Bandung. Before implementing the learning, the researcherprepare teaching materials that are accurate and easy for students to understand, learning media in the form of macromedia flash-based learning videos. Researchers also used the question and answer method to students to find out whether the treatment given was easy to understand or not by students, then the researchers did not forget to make anecdotal notes to evaluate the development of learning independence during the treatment process.

In carrying out the treatment, the first step taken by the researcher is to design a learning model to determine the steps or stages that will be applied in the teaching and learning process while the steps are as follows:

1. Determining the teaching objectives, in which the teaching objectives are formulated in the first to fourth meetings, the teaching objectives are expected: (1) students can develop attitudes (2) so that students can be creative and appreciate cultural arts, especially dance. In addition, in planning learning applications using macromedia flash-based dance learning videos, it is expected that: (1) students can understand the elements of dance, understand the basic movements in dance before learning dance forms or making works, (2) students can demonstrate the dance moves given. through learning videos as a form of independent learning.

2. The teacher determines the method of several teaching methods that are appropriate to the dance learning to be studied, namely Problem Based Learning based on interactive multimedia with basic dance motion material that has been adapted to the syllabus of cultural arts (dance) class XI even semester at SMA Negeri 10 Bandung.

3. Develop learning steps, namely the process of making lesson plans, the steps made and compiled by the teacher, in order to facilitate the implementation of the learning process.

Table 1. Stages of learning indicators

Learning Stage	Indicator	Sub-Indicator
Meeting 1	Exploring and concept	a. Students are able to identify the basic movements of dance

Meeting 2	Developing Skills	(head, hands, feet). Students are able to give examples of various basic dance movements
		a. Students are able to imitate various basic dance movements (head, hands, feet). Students are able to repeat the basic rhythm of dance movements
Meeting 3	Creating	a. Students are able to create movements that have been made Students are able to compose dance moves that have been made
Meeting 4	Demonstrating	Students are able to display or show dances that have been arranged in public in groups

Results of Student Learning Independence After Application of Macromedia Flash-Based Dance Learning Videos

After the learning process was carried out, the researchers conducted a post-test as an effort to determine the effect of applying macromedia flash-based dance learning videos in increasing student learning independence. The post-test was conducted with 10 multiple choice questions. The assessment was carried out individually both in the experimental class and in the control class. Class XI IPA 4 (Experimental Class) is increasing, but there aresome students whose grades are fixedIn the experimental class, the highest score was 90 with the lowest score obtained, namely 65. The results of the SPSS descriptive analysis are presented as follows.

Table1. Results of Descriptive Analysis with SPSS

Descriptive Statistics

	N	Minimum	Maximum	mean	Std. Deviation
Experiment Pretest	34	45	80	59.85	9,333
Experiment Posttest	34	60	90	73.38	7,357
Pretest Control	36	45	80	60.42	7,962
Control Posttest	36	50	80	62.08	8,974
Valid N (listwise)	34				

The results of the application of macromedia flash-based dance learning videos to increase learning independence, from the first results, yu. Like the monastery, it obtained an

average score of 87.2. The average score obtained by students exceeds the KKM 65 limit. This shows that the learning method applied is able to increase students' independence in learning.

Table 3. One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		34
Normal Parameters, b	mean	.0000000
	Std. Deviation	7.34384809
Most Extreme Differences	Absolute	.134
	Positive	.134
	negative	-.084
Test Statistics		.134
asymp. Sig. (2-tailed)		.126c

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Based on the Kolmogrof-Smirnov test in the table above, it shows a significance value of 0.126, where the significance value is greater than 0.05. So it can be said that the variables are normally distributed. The following is the homogeneity test.

Table 4. Homogeneity Test

Test of Homogeneity of Variances

	Levene Statistics	df1	df2	Sig.
XI IPA 4 Posttest	1.385	4	28	.265
XI IPA 4 Pretest	.859	4	28	.500

From the results of the homogeneity test above, the value of sig. Pretest homogeneity is 0.500 > 0.05, these results indicate that the pretest test in the experimental class is homogeneous, with Levene's statistic of 0.859. while the results of the posttest homogeneity test are 0.265 > 0.05, these results indicate that the posttest test in the experimental class is homogeneous, with Levene's statistic of 1.385.

Hypothesis testing

Based on the calculation obtained= 0.35whereas= 2.036.. Then it can be concluded that < , then it meansH0accepted andH1rejected. This shows that there is no significant effect in the application of dance learning videos in increasing student learning independence after applying macromedia flash-based learning.

Test the Significance of the Difference in Average Pretest and Posttest Scores

To test the significance of the difference in the average values of X and Y, use the t-test calculation formula which will be described below:

$$t = \frac{Md}{\sqrt{\frac{\Sigma x^2 d}{n(n-1)}}}$$

Calculations will be presented in the following table:

Table 5. Distribution of Student Pretest, Posttest and Gain Scores

Respondent	*Pretest*	*Posttest*	Gain (d) = (YX)
1	60	75	15

2	60	80	20
3	65	75	10
4	50	65	15
5	65	70	5
6	55	75	20
7	60	65	5
8	70	75	5
9	75	80	5
10	55	70	15
11	50	65	5
12	60	75	15
13	45	80	35
14	50	70	20
15	80	90	10
16	65	90	25
17	55	75	20
18	60	75	15
19	70	75	5
20	75	80	5
21	55	70	15
22	50	70	20
23	60	75	15
24	45	60	15
25	50	80	30
26	80	90	10
27	60	70	10
28	60	75	15
29	65	75	10
30	50	70	20
31	65	80	15

32	55	70	15
33	50	70	20
34	65	75	10
Amount	2035	2535	490

Look for with= 0.05and dk= 33;$_{0.025\ 32}$= 2,036.If= 0.35 <= 2,036.Thus there is a significant average difference between the results of the pretest and posttest.

Multiple Linear Regression Test

From the results of Coefficientsa (Test Hypothesis using t-test), simple regression analysis can be analyzed using the formula.
Y' = a + bX1 + bX2 the result, can be seen in the cells that have significant information. If the significance value (Sig.) is greater than the probability of 0.05, it can be interpreted that there is no effect of implementing macromedia flash-based dance learning videos by increasing students' independence, but if the significance value (Sig.) is smaller, it can be interpreted that there is an effect on the application of video. macromedia flash-based dance learning by increasing students' independence. In significant cells there are 0.003 which is less than 0.005. It can be concluded that the variable X has an effect on the variable Y.

From the results of the equation it can be concluded, the regression coefficient bX1 (Pretest Value) is positive (+), but the bX2 (Posttest) value is negative (-), the pretest results tend to be greater in value than the posttest, so it can be said that the application of video macromedia flash-based dance learning by increasing student independence which has a positive effect.

DISCUSSION

The application of macromedia flash-based dance learning videos to improve student learning independence. Video-based learning is a method that identifies an event or occurrence to students who are conveyed through speech, expressions and unique facial expressions (Muhammad Fadilah 2012) Independent learning is very important in the student learning process to increase self-confidence, responsibility, discipline, courage and optimism. Because with the independence of students' learning, the process of learning activities tends to be better and can manage their learning effectively, save time to be more efficient, can direct and control themselves in thinking and acting and not feeling dependent on others. Thus, student learning independence needs to be planted in ongoing learning activities

From the results of the analysis with various data tests conducted regarding theMacromedia flash-based dance learning to increase student learning independence has increased. Before using this media students only listened to the teacher without any response and reciprocity in the learning process, this attitude was due to the lack of students' confidence in expressing their opinions and suitable media to become intermediaries or attract students to express their opinions, and can explore dance movements with independent. In addition, the macromedia flash-based video learning stimulus showed students' enthusiasm and enthusiasm so that students were able to develop the exploration of dance movements given by the teacher well, and the results of dance learning using the fable story stimulus method showed positive responses.

In the learning process, the use of macromedia flash media showed a scale score of 81%-100% which was categorized as very good

student activity. So it can be concluded that the implementation of learning carried out by teachers has an average result of 85.7%. According to Arikunto, the score obtained in his book is in the very good category. So it can be concluded that the implementation of dance learning by the teacher during the application of macromedia flash-based dance learning videos is very good for increasing student learning independence. Obtaining these data can strengthen the acquisition of data taken through the provision of test instruments to improve the application of dance learning videos based on macromedia flash, all of which are done by students in class XI.

The results of the application of macromedia flash-based dance learning videos obtained an average score of 87.2 exceeding the learning criteria of 65. This indicates that the applied learning method is able to increase students' independence in learning. From resultthe previous regression test that the results of the above equation can be concluded, the value of the regression coefficient bX1 (Pretest Value) is positive (+), but the bX2 (Posttest) value is negative (-), the pretest results tend to be greater in value than the posttest. Thus, it can be said that the application of macromedia flash-based dance learning videos affects students' independence in the learning process. This can be seen from the results of trials conducted by research at SMA Negeri 10 Bandung.

CONCLUSION

The results of the application of macromedia flash-based learning videos in increasing student independence in the dance learning process show an increase in student independence in the learning process, the reciprocity between teachers and students is one of the improvements. Before the use of

macromedia flash-based dance video learning media, students tended to be passive and there was no reciprocity due to monotonous learning and less interesting learning media. This causes students not to be independent in the learning process, they tend to follow without the independence of studying, after using macromedia flash-based learning media students tend to be active because the media is interesting and not boring,so it can be said that the application of dance learning videos based on macromedia flash to increase student independence has a positive effect in SMA Negeri 10 Bandung. This research is recommended for further researchers who will conduct research on macromedia flash both in the education system and others.

THANK-YOU NOTE

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