Effectiveness of Using E-Senbud as Android-Based Art Culture Learning Media at SMAN 1 Sumbawa Besar

*Ageng Zactian, Umar, Desi Maulidyawati

Innovation Management Study Program, Sumbawa University of Technology, Indonesia
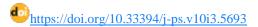*Corresponding Author e-mail: milan.challys@gmail.com

Abstract

Learning is a process and effort to create learning conditions that optimally develop students' skills, interests, and talents so that they can achieve their competencies and goals. The achievement of learning objectives depends on the use of media strategies and the use of media. The purpose of this study was to determine the feasibility and effectiveness of using E-Senbud as a learning medium to increase student learning productivity at SMAN 1 Sumbawa Besar. Collecting data using questionnaires and field observations on a sample of 100 students. The type of research used by the researcher is qualitative research with descriptive research characteristics. The results of the feasibility and effectiveness aspects of the test by material experts obtained an average score of 94,13%, the linguists obtained a percentage score of 90,00%, and the results of the assessment according to student responses obtained an average score of 96.00% with very feasible criteria. So it can be concluded that the use of E-Senbud learning media in cultural arts subjects is very effective in increasing the learning productivity of SMAN 1 Sumbawa Besar students.

Keywords: E-Senbud, learning media, feasibility, and effectiveness

INTRODUCTION

Teachers as the main component in the world of education are required to be able to keep up with technological developments as they are today so that they can apply them both in the classroom and in the classroom in the community (Rahayu et al., 2022; Susilo & Sarkowi, 2018) . Currently, many teachers still apply the old teaching methods, such as the method of learning through books or other methods that are less attractive. This is also still applied to high school students, especially when learning Cultural Arts. Some students sometimes have difficulty in remembering and understanding learning, this can be due to the limited learning media used by teachers so that there is a lack of student interest in participating in ongoing teaching and learning activities. In addition, the learning media used are less attractive so that the material presented cannot be captured properly by students. Teachers are required to be able to design learning and materials that can be implemented with information and communication technology to implement them (Gazali & Francesca, 2021; Riwayadi, 2013) .

Currently, many teachers still apply the old teaching methods, such as the method of learning through books or other methods that are less attractive. This is also still applied to high school students, especially when learning arts and culture. Some students sometimes have difficulty in remembering and understanding learning, this can be due to the limited learning media used by teachers so that there is a lack of student interest in participating in ongoing teaching and learning activities. In addition, the learning media used are less

attractive so that the material presented cannot be captured properly by students. When this happens at the learning stage, students will have difficulty following the learning material being taught or the next material that will be taught later. The development of technology today is very rapid, it certainly has a big impact on the world of education, such as the way of delivering material in the process of teaching and learning activities and the media used in the learning process. Now students tend to be interested in new and modern things, one of which is games (Muhson, 2010; Surjono, 2013) . It is undeniable that today's children like technology-based games, whether they are played from *mobile phones* , computers and other electronic devices. In this case, the use of game-based learning media is one option so that the quality of learning can improve.

The use of learning media in the form of interactive games is expected to facilitate the student's learning process with the concept of playing while learning. so it is important for writers to using an interactive learning media named E-Senbud. This learning media is used by teachers as intermediaries to deliver learning materials, stimulating students' attention, interests, thoughts, and emotions to achieve their learning goals (Febrita & Ulfah, 2019; Tafonao, 2018; Teni Nurrita, 2018) . E-Senbud is an interactive game innovation that runs offline that can be played by students to stimulate creativity, increase curiosity and enthusiasm for learning. In addition to being played offline, E-Senbud also has several advantages, namely the illustrations used are in accordance with the material being taught, the material is in accordance with the learning objectives, the material is easy to understand, and the game flow that is presented is very interesting. Therefore, in this study, students' interest in learning will be increased, which refers to indicators of learning success both in terms of knowledge and skills. Based on this background, the purpose of this study was to determine the effectiveness of using E-Senbud as a learning medium to increase student learning productivity.

METHOD

The research was conducted at SMAN 1 Sumbawa Besar which is located at Jalan Garuda No. 1 Sumbawa Besar, Sumbawa Regency, West Nusa Tenggara Province . This research was conducted from May to June 2022. This type of research is descriptive quantitative which is a method that aims to make a picture or descriptive about a situation objectively using numbers, starting from data collection, interpretation of the data and appearance and results (Arikunto, 2010) .

Population in this study were all students of class X for the academic year 2021/2022, totaling 267 students . The number of samples in this study were 100 students . The sampling technique in this study is purposive sampling , which is a technique determination and sampling determined by the researcher with certain considerations (Maharani & Bernard, 2018) .

The instruments in this study were questionnaires which were distributed and filled out by material experts, language experts and students of SMAN 1 Sumbawa Besar. To measure the response of the respondents used 5 Likert scale by giving a score for each answer that is filled in by the respondent. This study uses two types of data sources, namely primary data and secondary data . The following is a description of the primary and secondary data sources, as well as the data sources used that is :
 a. Primary data in this study were obtained from data from questionnaires distributed to material experts, linguists and student respondents.
 b. Secondary data in this study were obtained from library materials, literature, previous research, books, and so on.

Data collection techniques in this study were observation, interviews and questionnaires. The instrument used in this study was a questionnaire distributed and filled out by experts and student respondents. The research instrument is a tool used by researchers

to collect research information about the variables studied including the feasibility and effectiveness of using E-Senbud learning media in arts and culture subjects.

The data obtained, namely quantitative data from closed questionnaires, were analyzed using descriptive analysis techniques. Respondent questionnaire analysis was conducted to determine the average percentage of respondents who responded to the effectiveness of using E-Senbud learning media in arts and culture subjects using descriptive statistics, using the formula :

$$p\ (\%) = \frac{\sum X}{\sum X_i} x100\%$$

Where:

p : the percentage you are looking for

$\sum X$: total student answer score

$\sum X_i$: the number of ideal values or the highest value

As a basis for making decisions to determine the feasibility and effectiveness of using the E-Senbud learning media, the assessment criteria adapted from the book on the basics of educational evaluation by (Arikunto, 2010) are used, as follows:

Table 1. Criteria Level of Validity

Percentage (%)	Effectiveness Level	Validation Criteria
85 - 100	Very effective	Very Worthy
70 - 84	Effective	Worthy
55 - 69	Effective enough	Decent enough
50 - 54	Less effective	less worthy
0 - 59	Ineffective	Very less

Furthermore , the data quality test is divided into two , namely the validity test and the reliability test . Validity test is used to measure the quality of the questionnaire used as an instrument study so that instrument which used said valid and on the questionnaire is able to reveal something that is measured (Pujihastuti, 2010) . While the reliability test is used to measure the variable indicators of a questionnaire with something questionnaire *reliable* or reliable if answer to statement is consistent over time (Handayati, 2016) .

RESULTS AND DISCUSSION

Results study this produce effective use of media learning E-Sen b ud on eye lesson art culture material a precision art. The research results described in this study include two parts that describe: (a) the feasibility of E-Senbud as an android-based learning media , (b) the effectiveness of using E-Senbud as a cultural arts learning medium to increase student learning productivity at SMAN 1 Sumbawa Besar .

Material Expert Assessment

Material experts who became validators in this study were the Principal, Deputy Head of Curriculum, Arts and Culture Teachers and Dupak Assessment Assessors . The average percentage of answers from the aspects of feasibility and effectiveness of material experts can be seen in the Figure 1.
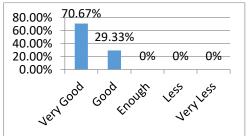

Figure 1. Bar Chart Average Material Expert Answers

Based on Figure 1 above, it shows that the material expert's assessment of the use of E-Senbud as an Android-based cultural arts learning media seen from the feasibility and effectiveness aspects obtained data that 70.67% of material experts said it was very good, 29.33% said good, 0% stated enough, 0% said less and 0% said very less.

The results of the assessment from material experts can be seen in table 2.

Table 2 . Material Expert Assessment Results

Criteria Evaluation	x Per-Criteria	Score Max	Percentage Score (%)	Category
Material Eligibility	165	175	94.29%	Very Worthy
Material Effectiveness	188	200	94.00 %	Very Worthy
	353	**375**		
Amount Total			**94.13%**	
Maximum Score Percentage (%) Criteria				**Very Worthy**

Shows the results of the assessment from the aspect of appropriateness Theory get score percentage 94.29 % with very good criteria, aspectthe effectiveness of the material gets a percentage score of 94.00 % with very decent criteria. So that obtained score percentage average from whole aspect is 94,13 % which categorized as the use of E-Senbud as an android-based cultural arts learning media is very worthy .

Assessment By Linguist

Linguists who become validators in this study are Indonesian language teachers who have an educational background in the field of language and already have experience in the field of linguistics . The average percentage of answers from the aspect of feasibility and effectiveness of linguists can be seen in the bar chart, as follows:
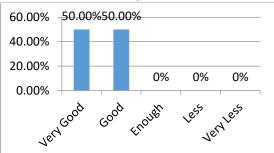

Figure 2. Bar chart average of Linguists ' Answers

Figure 2 above shows clearly that the linguist's assessment of the feasibility and effectiveness of the language used in the E-Senbud learning media obtained data that 50.00% of linguists said it was very good, 50.00% said good, 0% said enough, 0% said less and 0% stated very less. The results of the assessment of the material experts can be seen in table 3.

Table 3. Results of Linguistic Expert Assessment

Criteria Evaluation	x Per-Criteria	Score Max	Percentage Score (%)	Category
Language Eligibility	36	40	90.00 %	Very Worthy
Language Effectiveness	45	50	90.00%	Very Worthy
	81	**90**		
Amount Total			**90.00 %**	
Maximum Score Percentage (%) Criteria				**Very Worthy**

Shows the results of the assessment from the aspect of appropriateness language get score percentage 90.00 % with very good criteria, aspect language effectiveness got a percentage score of 90.00 % with very decent criteria. So that obtained score percentage average from whole aspect is 90.00 % which categorized as the language used on E-Senbud is very decent.

Assessment by Student Respondents

At this stage, it aims to test the effectiveness of the use of the media learning this to students. Instrument which used is instrument which arranged based on assessment standards, The following are the results of the feasibility and effectiveness assessment of the use of E-Senbud as a learning medium by: students from each item of student respondents' questions and answers:

Table 4. Descriptive Analysis of the Distribution of Student Respondents' Answers

No	Question	Answer Options					Total (%)
		SB (%)	B(%)	C (%)	K (%)	SK (%)	
Appropriateness							
1	Media explains KI / KD correctly	83.0	17.0	0	0	0	100
2	The suitability of indicators with learning objectives	79.0	21.0	0	0	0	100
3	The suitability of indicators with the cognitive level of students	81.0	19.0	0	0	0	100
4	The suitability of the material with the learning objectives	90.0	10.0	0	0	0	100
5	Audio-Visual Media	76.0	21.0	3.0	0	0	100
6	Media Performance	71.0	29.0	0	0	0	100
7	Media Accessibility	72.0	28.0	0	0	0	100
Average		**78.85**	**20.71**	**0.37**	**0**	**0**	
Effectiveness							
8	Compatibility of illustration with material	73.0	27.0	0	0	0	100
9	Interesting game storyline	73.0	27.0	0	0	0	100
10	Instructions for use are easy to understand	86.0	14.0	0	0	0	100
11	This application can foster learning motivation	80.0	20.0	0	0	0	100
12	The questions presented are easy in evaluating the learning process	84.0	15.0	1.0	0	0	100
13	Increase curiosity and enthusiasm in learning	84.0	16.0	0	0	0	100
14	The material presented is easy to understand	86.0	13.0	1.0	0	0	100
15	The language used is communicative	88.0	11.0	1.0	0	0	100
Average		**81.75**	**17.87**	**0.37**	**0**	**0**	

Based on the results of table 4 showing the distribution of answers on the feasibility aspect, the average student respondents' answers showed: very good 78.85%, good 20.71%, quite 0.37%, less 0%, and very poor 0%. On the aspect of effectiveness, the average answers of student respondents showed: very good 81.75%, good 17.87%, 0.37% enough, 0% less, and very less 0%.

The average percentage of answers from the feasibility and effectiveness aspects of student respondents can be seen in the bar chart, as follows:

Figure 3 . Bar Chart Average of Student Respondents ' Answers

Based on Figure 3 above, it shows that students' assessment of the effectiveness of using E-Senbud as a cultural arts learning media obtained data that 80.40% of students gave very good responses, 19.20% of students said they were good, 0.40% said enough, 0% said less and 0% said very less.

After giving points from the student respondent's questionnaire, the next step is next is determine score percentage that will show whether or not the use of E-Senbud is feasible and effective as an android-based learning media for arts and culture . Table under this is results percentage of effectiveness of using E-Senbud as a medium Android-based cultural arts learning after being given a score, namely:

Table 5. Student Respondent Assessment Results

Criteria Evaluation	x Per-Criteria	Score Max	Percentage Score (%)	Category
Appropriateness	3349	3500	95.69%	Very Worthy
Effectiveness	3851	4000	96.28 %	Very Worthy
Amount Total	**7200**			
Maximum Score		**7500**		
Percentage (%)			**96.00 %**	
Criteria				**Very Worthy**

Shows the results of the assessment from the aspect of the feasibility of using E-Senbud as an android-based cultural arts learning media score percentage 95.69% with criteria very worthy, and the effectiveness of using E-Senbud as an android-based cultural arts learning media got a percentage score of 96.28% with very decent criteria. So that obtained score percentageaverage from whole aspect is 96.00% which categorized as very worthy. So it can be concluded that the media learning this very effective in help increase student learning productivity SMA N 1 Sumbawa Besar in arts and culture subjects.

Data Quality Test Results
a.   Validity Test Results
Validity test is a stage that is carried out to find out and ensure the questionnaire study which used valid or no. If the item in each statement has rcount > rtable, then the statement is declared valid. In this study, the number of samples (n) = 100 respondents and the degree of freedom (df) can be calculated as 100-2 = 98 with df = 98 and an alpha of 0.05 obtained rtable = 0.196. So, each statement is said to be valid with rcount > 0.196. The results of the validity test in this study are:

Table 6. Validity Test Results

Variable	I indicator	^{r} count	^{r} table	To moan
Appropriateness	K $_1$	0.669	0.196	Valid
	K $_2$	0.672	0.196	Valid
	K $_3$	0.484	0.196	Valid
	K $_4$	0.317	0.196	Valid
	K $_5$	0.655	0.196	Valid
	K $_6$	0.634	0.196	Valid
	K $_7$	0.510	0.196	Valid
Effectiveness	E $_1$	0.566	0.196	Valid
	E $_2$	0.642	0.196	Valid
	E $_3$	0.531	0.196	Valid
	E $_4$	0.587	0.196	Valid
	E $_5$	0.633	0.196	Select
	E $_6$	0.800	0.196	Select
	E $_7$	0.516	0.196	Select
	E $_8$	0.605	0.196	Select

Based on Table 6 proves that all statement items in the study have a positive correlation coefficient value and a value greater than the value of r $_{table}$. This proves that every items statement which used in study declared valid.

b.   Reliability Test Results

Reliability testing is used to test the level of data consistency within a certain period of time and repeatedly, so that it can determine the extent to which the measurements used are reliable. The variable used in the research with *Cronbach alpha* has a value > 0.60, then the instrument can be used as a reliable data collection and the instrument can be said to be reliable . The results of reliability testing on the aspects of feasibility and effectiveness can be seen in table 7 below:

Table 7. Reliability Test Results

Variable	Cronbach's Alpha	N of Items	Information
Appropriateness	0.730	7	Reliable
Effectiveness	0.802	8	Reliable

From the reliability test results above, the entire value of *Cronbach's alpha* for each variable is greater than 0.60. The feasibility variable with *Cronbach's alpha value is* 0.730, and the effectiveness variable is 0.802. Thus, it can be concluded that all research instruments are reliable.

CONCLUSIONS

The feasibility of using E-Senbud as an android-based learning media in eye lesson art culture is categorized as very feasible which is indicated by the percentage of material experts who get an average score of 94.29, linguists get an average score of 90.00% and student respondents get an average score of 95.69% . While the results of the effectiveness test of using E-Senbud as an Android-based learning media according to material experts obtained an average score of 94.00%, linguists obtained an average score of 90.00%, and from 100 samples of student respondents who used learning media it achieves an average score of 96.28% . So it can be concluded that the use of E-Senbud learning media in arts and

culture subjects is very effective in increasing the learning productivity of SMAN 1 Sumbawa Besar students.

RECOMMENDATIONS

Based on the results of this study, Researchers also provide suggestions that the E-Senbud learning media can be used as a ingredient teach for teacher in process learning art and culture on art appreciation material, so that it can provide new innovations in the development of learning media that discuss learning materials that have not been used yet there is.

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