

DEVELOPING INDONESIAN E-MODULE ASSISTED BY STORYTELLING PODCAST CONTAINING CHARACTER EDUCATION

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Keyword

e-module, Indonesian, podcast, education, character, elementary school.

Abstract

The aim of this paper was to develop an Indonesian e-module with the help of a storytelling podcast containing character education in elementary schools. The study used ADDIE model research and development (R&D) method. The research phase was designed in five stages, namely (1) Analysis, (2) Design, (3) Development, (4) Implementation, and (5) Evaluation. The study result was a product of Indonesian e-module and storytelling podcast containing character education. ADDIE model R&D method showed that e-module was effective in increasing students' knowledge. This Indonesian e-module assisted by a storytelling podcast containing character education is very suitable in student learning in elementary schools.

INTRODUCTION

Education has experienced a very rapid development through digital learning by utilizing the development of information and communication technology. Our society has now evolved from digital immigrant to digital native generation (Pensky, 2001). Innovations from the use of technology need to be adopted into the curriculum and learning.

Learning in elementary schools in the Merdeka curriculum requires teaching modules that contain learning objectives, steps, and media, as well as assessments needed in one unit/topic based on the Learning Objective Flow (Kemdikbudristek, 2023). Apart from being a learning resource and learning media, the module also acts as an intermediary or liaison from the information provider, namely the teacher to the recipient of the information or students which aims to stimulate students to be motivated, and able to participate in the learning process in a complete and meaningful way (Hasan et al., 2021). Problems occur when the modules provided by the Ministry of Education, Culture, and Research to be used are very limited in number. As a result, it is necessary to develop teaching modules by teachers to accommodate the needs. The next problem is the use of student worksheet books made of opaque paper. These teaching materials are very boring and uninteresting for students. In addition, the use of student worksheet emphasizes too much on the cognitive side and memorization, while learning in the Merdeka curriculum also emphasizes the development of student's character. The cultivation of character value in the Merdeka curriculum is synthesized with the project of strengthening the Pancasila student profile which consists of six dimensions, namely 1) faith, devotion to God Almighty, and noble character, 2) independence, 3) mutual cooperation, 4) global diversity, 5) critical reasoning, and 6) creative (Keputusan Badan Standar, Kurikulum, Dan Asesmen Pendidikan Kementerian Pendidikan, Kebudayaan, Riset, Dan Teknologi Nomor 009/H/KR/2022

Tentang Dimensi, Elemen, Dan Subelemen Profil Pelajar Pancasila Pada Kurikulum Merdeka, 2022).

Based on the background mentioned, the use of technology in learning becomes more urgent to be applied. The design of digital learning modules is important to be applied to learning. Electronic modules are one of the digital-based non-print teaching material products that are independently designed to be studied by students (Kuncahyono, 2018). Modules must also be prepared by considering the cultivation of character values. Character education is the intentional, proactive effort by schools, districts, and states to instill in their student important core, ethical values such as caring, honesty, fairness, responsibility, and respect for self and others (Singh, 2019). The cultivation of character values can be done well through stories. Storytelling can be an effective medium to teach character to Indonesian children (Hendarman, 2020). Stories that are interesting and rich in character values can influence the personality of students. Stories that are routinely obtained by children, it is hoped that the process of internalizing good character as shown by the characters will occur within the children (Nayla et al., 2023).

The combination of modules as teaching materials and as storytelling media, will be delivered through podcast media. A podcast is a form of episodic digital audio that is uploaded to an online platform to be enjoyed by the general public (Phillips, 2017). Learning media using podcasts can also increase student's interest in learning because it is something new and varied so that students do not feel bored in carrying out learning (Heshmat et al., 2018). The added value that can be carried out from this study is the combination of digital modules and podcasts that contains character values.

METHOD

Educational development research is conducted to produce electronic module learning products. The electronic module is then tested for feasibility before being used in learning (Gall et al., 1996). The purpose of this research is to produce an Indonesian learning module in the form of electronic module assisted by storytelling podcast containing character education that feasible to be applied to learning. Product development refers to the steps of ADDIE model research and development method. The development of the ADDIE model is carried out in five stages. Based on the development model, the developer applies it into the development procedure (Chaeruman, 2008), namely analysis, design, development, implementation, and evaluation.

Based on the data to be used, the data divided into two types, namely narrative data (qualitative) and numerical data (quantitative). Data collection technique in this study used document study techniques, interview techniques and filling out questionnaires, and test techniques. The research subjects in this study were teachers, principals, and students in total 20 students of SDN 4 Sampang, Sempor sub-district, Kebumen district.

Qualitative analysis techniques in the form of comments, suggestions, and input from validators on e-module products. Quantitative analysis in this study was a data analysis for questionnaires of material experts and media experts with the following formula. The qualitative analysis technique consists of comments, suggestions, and feedback from validators on the e-module product. The quantitative analysis in this research involved data analysis for the questionnaires from material experts and media experts using the following formula.

- 1) Data formula per item

$$P = \frac{X}{X_1} \times 100\%$$

Description:

P : Percentage (%)

X : Number of answer scores from respondents

X₁ : Total scores of the instrument

- 2) The formula for processing data for all item is

$$P = \frac{\sum X}{\sum X_1} \times 100\%$$

Description:

P : Percentage (%)

$\sum X$: Total score of all respondent's answer

$\sum X_1$: Total number of maximum scores in the whole instrument

After obtaining the results of the data processed using the formula above, the results were compared with the eligibility criteria as follows:

Table 1. Criteria for the feasibility level of web-based teaching materials (Sugiyono, 2016)

Category	Percentage	Qualification	Equivalent
4	86% - 100%	Not revised	Very Feasible
3	76% - 85%	Not revised	Worth
2	56% - 75%	Needs revision	Decent Enough
1	≤ 55%	Must be revised	Not Feasible

Test effectiveness through the research design model regarding the effectiveness of learning using the One Group Pretest-Posttest Design which can be seen in table 3 follow:

Table 2. Effectiveness Design Model

Class	Pretest	Treatment	Posttest
Experiment	O_1	X	O_2

RESULTS

This study aims to develop an electronic module or e-module of Indonesian with the help of podcast storytelling containing character education for elementary school students. The analysis stage included document analysis to find out the available learning documents. Based on the analysis of existing documents, it was concluded that the teaching module used by the school was not available. The school only relied on lesson books and student worksheet books. Analysis of the needs of teachers and students concluded that there was a need for learning modules to support the learning process.

The design stages included determining learning objectives, determining product specifications, and creating product prototypes. Product development was done using Canva for Education while podcast creation used the Spotify for Podcaster application. The podcast audio was recorded using The Dolby On application. Afterward, the recording results were processed using The Audacity application to create storytelling containing character education. The following is the interface of the electronic module.

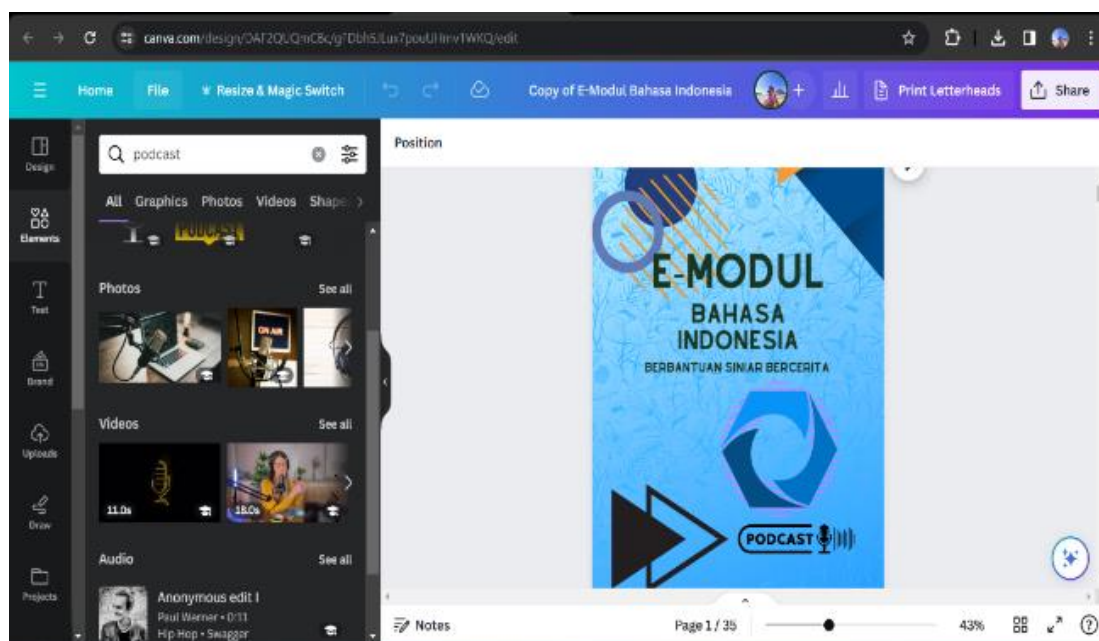


Figure 1. E-Module Creation View in Canva

The development stage carried out through the product feasibility validation process. The validation included material expert validation and media expert validation. The results of the material expert validation presented in table 3 below.

Table 3. Material Experts Validation Results

No.	Aspects	Total Score	Conclusion
1	Content Component	42	Very suitable for use without revision
2	Language Component	15	
3	Material Presentation Component	27	
4	Media Component	66	
	Total	150	
	Maximum Score	160	
	Assessment and Eligibility Criteria	94%	

The results of the media expert validation presented in the table 4 below.

Tabel 4. Media Expert Validation Results

No.	Assessment Indicator	Assessment Score					Conclusion
		1	2	3	4	5	
1.	The module title represents the overall material to be learned				√		Very suitable for use without revision
2.	Module title interests the reader					√	
3.	Module pages are well organized					√	
4.	Typeface selection makes it easier for students to read					√	
5.	Attractive font selection					√	
6.	Font size selection makes it easy					√	
7.	Ease of accessing and using the device					√	
8.	Practicality of using e-modules assisted by storytelling podcasts					√	

9.	Ease of operating the e-module	√
10.	Systematic order of the e-module	√
11.	Easy access to audio storytelling podcasts	√
12.	Audio quality on storytelling podcast	√
13.	Use of sentences and words according to good and correct Indonesian	√
14.	Accuracy in the use of effective and efficient sentences.	√
Total score		66
Total Maximum Score		70
Validity Assessment and Criteria		94%

The implementation stage carried out by testing the feasibility of the product on teacher and students. The results of the feasibility test presented in the table 5 below.

Table 5. Feasibility Test Results

No.	Aspects	Total Score		
		R1	R2	Average Score
1	Content Component	42	43	42,5
2	Language Component	15	15	15
3	Material Presentation Component	27	26	26,5
4	Media Component	66	68	67
Total		150	152	151
Maximum Score		160	160	160
Assessment and Eligibility Criteria		94%	95%	94%

The evaluation stage carried out in learning to determine the effectiveness of the electronic module. Indicators of the effectiveness of the use of Indonesian e-modules assisted by storytelling podcast containing character education measured through learning outcomes or tests. The difference in effectiveness before using the product and after using the product assessed using a T-test analysis (independent sample T-test). The following were the results of the significance hypothesis test in this study.

Table 6. Descriptive Statistics Results

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error
Pair 1	Indonesian Pretest	63,80	20	9,578	2,142
	Indonesian Posttest	81,00	20	6,207	1,388

Table 7. T-test Results

Paired Samples Test									
		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference	t	df	Sig. (2-tailed)	
					Lower	Upper			
Pair 1	Indonesian Pretest -	-17,200	4,124	,922	-19,130	-15,270	-18,650	19	,000

Indonesian
Posttest

Based on the output table of the T-test results, the sig value = 0.000 is obtained, which means it is smaller than α 0,05. Thus H_0 is rejected and H_1 is accepted. H_0 = there is no difference in Indonesian test scores before and after using the Indonesian e-module product assisted by storytelling podcast containing character education. H_1 = there is a difference in Indonesian test scores before and after using the Indonesian e-module product assisted by storytelling podcast containing character education.

Based on the results of the descriptive analysis, the average value of student's pretest was 63.80 and posttest was 81. This indicated an improvement in the Indonesian test scores after using the Indonesian e-module product assisted by storytelling podcast containing character education. Thus, it can be concluded that the use of Indonesian e-module product assisted by storytelling podcast containing character education has a significant effect on improving Indonesian scores.

DISCUSSION

Based on the study that has been conducted, it was found that the use of Indonesian e-module product assisted by storytelling podcast containing character education is effective to be applied in student's learning in elementary schools. This result is in line with the character of the module which is able to foster creativity, productive thinking habits, create active, effective, innovative and fun condition (Budiarti et al., 2016). Electronic modules are also self-instructional, self-contained, stand alone, adaptive, and user friendly (Kementerian Pendidikan dan Kebudayaan, 2008)

CONCLUSION

This research and development produced a product, namely an Indonesian e-module product assisted by storytelling podcast containing character education. This research and development process used the ADDIE model. The results of the material expert validation of this e-module obtained assessment data from the total of all aspects is 94% with very feasible criteria. The results of media expert validation of this e-module obtained assessment data from the total of all aspects are 94% with very feasible criteria. The results of the effectiveness test using the percentage of completeness scores were 80% of students complete. Hypothesis testing using data analysis of experimental research design one group pretest-posttest average value of 81. The class average score after using the product increased by 17,20 from 61,80. Hypothesis testing on the T-test stated a significant difference before and after using the e-module.

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