

Development of History E-Modules: Book Creator Application as a Learning Innovation in the Era of Independent Learning

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ABSTRACT

This research aims to produce E-module products, analyze the feasibility of E-modules, analyze the practicality of E-modules, and determine the effectiveness of E-modules. Research and development methodology uses the ADDIE model, which consists of stages: analysis, design, development, implementation, and evaluation. Development of the E Module using Book Creator on the history subject of the independent era studied at SMAS Panca Budi Medan. The research results show: Based on the results of material expert validity tests, the E Module using Book Creator in the History of the Independent Learning Era subject is very suitable for use with an average gain of 90.7%; the results of the media expert validity test, E Module using Book Creator in the History subject, are very feasible with an average score of 93.1%; the design expert's validity test results were very feasible with a score of 86%; Based on experiments conducted in the experimental class, where learning used the E Module, the average student learning outcome was 92.93; and the results of the T and N-Gain Score tests on the learning outcomes of experimental class students show that the E Module is effectively used in history learning, where the average gain of the N-Gain Score test is 83.33%, and based on the Independent Samples Test, Sig is obtained. . (2-tailed) of 0.001, where $0.001 < 0.05$

KEYWORDS

e-module; book creator; independence era; history learning outcomes

INTRODUCTION

Education is a human effort to grow and develop innate potential, both physical and spiritual, in accordance with the values that exist in society and culture (Ihsana, 2017). To develop this potential, elements are needed that support each other. There are five important elements that support the smooth running of education, namely (1) educators, (2) students, (3) places, (4) learning programs, and (5) leaders (Lida, 2021). This explains that education cannot run well if only one party implements it well. There needs to be harmony and mutual support for all these elements.

A good learning environment and maximum teacher preparation in planning the teaching and learning process can have a positive and significant effect on the success of the learning process. Likewise, in terms of effectiveness, there is a positive and significant influence between teacher readiness to teach and the effectiveness of the teaching and learning process (Wahyudi, 2013). This means that the teacher's readiness to plan the learning process can determine whether the learning process is effective or not. Therefore,

to increase the effectiveness of learning, teachers must design their learning well, one of which is designing teaching materials that can be used in the learning process.

Lack of teacher mastery in the use of various strategies, learning methods, teaching materials, and learning resources. Another factor that is an obstacle is the lack of various forms of teaching materials used by teachers and students in the process of teaching and learning activities (Zulkifli, 2017). Teachers play an important role in designing learning to achieve learning objectives as expected. Therefore, teachers need to develop strategies, learning methods, teaching materials, and other learning resources that support the implementation of the learning process.

Learning resources are things that make learning activities easier. Conventional learning sources include handouts, lecture notes, textbooks, journal articles, and tutors (Abby Day in Cahyadi, 2019). However, in accordance with current developments, learning resources are also very developed, so they are very diverse in type and flexible in their use. There are six types of learning resources used in the learning process: messages, people, materials and programs, tools, methods, and settings (AECT in Cahyadi, 2019). Based on these developments, it can be seen that teaching materials are one of the learning resources that can be used in the learning process.

Internet users in Indonesia in 2022-2023 will be 215,626,156 people from a total population of 275,773,901 people. The increase in the number of internet users in Indonesia in 2023 will be 78.19%. It is also known that 98.88% of pupils and students access the internet. More specifically, at the high school level, students who use the internet make up 94.74% of the total number of students at the high school level. Meanwhile, internet users at the junior high school level make up 85.42% of the total number of students at the junior high school level (APJII, 2023).

An independent curriculum is interpreted as a learning design that provides opportunities for students to learn calmly, relaxed, fun, stress-free, and pressure-free, to show their natural talents (Rahayu, 2022). Implementing an independent curriculum in each educational unit requires teachers to design learning according to students' learning needs. Teachers not only design the learning process to achieve all the expected learning objectives but also ensure that each student can understand the lesson material provided contextually.

Learning activities in the independent curriculum emphasize constructivist learning theory. Constructivism theory is about generative learning, namely the act of creating meaning from what is learned (Dangnga, 2015). The general concept of constructivism theory is: (1) Students actively build knowledge based on existing experience; (2) In the learning context, students should build their own knowledge; (3) The importance of actively building knowledge by students themselves through a process of mutual influence between previous learning and new learning; (4) The most important element in this theory is a person who develops himself actively by comparing new information with existing understanding; (5) Imbalance is the main learning motivation factor; and (6) The teaching materials provided need to be related to the learning experience to attract students' interest.

Freedom to learn can be interpreted as the ability to reflect and adapt thoughts and actions to changes in the environment to achieve the expected goals. In carrying out independent learning, students must be independent in their learning in accordance with their own nature, while the role of educators is to care for and guide the growth of this nature. Therefore, to create freedom to learn, students must have a committed, independent, and reflective attitude (Wariastuti 2022).

Al-Yahmadi and Al-Shorman (2022) defines freedom to learn as freedom to think and develop oneself. Therefore, teachers must be able to develop learning motivation in

students. To achieve this goal, he further explained the strategies that teachers must carry out to realize independent learning for students, namely that teachers must: (1) foster good cooperation with students' parents; (2) be able to understand students' learning psychology; (3) be wise in providing assessments to students; (4) need to give rewards to students who have completed learning well; and (5) provide updates on science and technology and information related to methods, media, and learning materials.

The attitudes that students must have to realize freedom of learning. These attitudes mean that students must have an attitude of commitment, independence, and reflection.

Wariastuti (2022) explains that to foster an attitude of commitment in students, teachers need to involve students in determining learning goals in the learning process.

The ineffective implementation of history learning is caused by: (1) education is not centered on students; (2) there are still learning resources used by students to learn independently that are not relevant to learning activities at school; (3) there is still minimal accessibility and availability of materials owned by students; (4) there is still a lack of challenges for students' motivation and self-discipline; (5) there is a lack of support and guidance for students; (6) students have not yet maximized learning independently; and (7) learning media does not yet facilitate students' overall learning styles.

It is hoped that the use of e-modules developed in history subjects can be a solution to problems in learning. The success of research conducted by Herawati and Muhtadi (2018) and Saftiah (2023). From the research conducted by them, it can be seen that the results of the E-Module development are suitable for use and effective in improving student learning outcomes.

E-modules are teaching materials that are systematically designed based on a certain curriculum and packaged in certain time units, which are displayed using electronic devices such as computers (Aryawan, 2018). E-modules can be read using electronic devices or the internet (Ummah, 2017). The advantage of e-modules for learning is that they can increase the effectiveness and flexibility of learning regardless of space and time; they can make the learning process more interesting; and they don't get bored quickly because e-modules are equipped with various pictures, videos, and other interesting features that can increase student motivation. in learning (Ummah, 2017).

Sinulingga et al. (2023) explains that E-modules are modules in digital form consisting of text, images, or both that contain digital electronic material accompanied by simulations that can and are suitable for use in learning.

The E module has several principles. The Directorate of High School Development, Directorate General of Primary and Secondary Education (2017), describes the principles for developing the E Module as follows: Assumed to generate interest among students; Written and designed for use by students; Explain learning objectives; Arranged based on flexible learning patterns; Arranged based on the needs of students studying and achieving learning objectives; Focuses on providing opportunities for students to practice; Accommodate learning difficulties; Requires a careful navigation system; Always provide a summary. The writing style (language) is communicative, interactive, and semi-formal. It is packaged for use in the learning process. Requires learning strategies; Have a mechanism to collect feedback; Support self-assessment; explain how to study textbooks; and There need to be instructions and guidelines before and after using the E-Module.

Nasrul Makdis (2020), defines Book Creator as an application consisting of text, images, and sound and published in digital form that can be read on computers or other electronic devices, such as Android, smartphones, or tablets. Furthermore, Puspitasari and Rofi (2020) views Book Creator as easy to develop according to students' cognitive abilities to improve their abilities.

In the independent curriculum, learning outcomes for history subjects at the high school level are divided into two phases, namely Phase E and Phase F. Phase E is class X, while phase F is classes XI and XII. In phase E, there are two elements: understanding historical concepts and historical process skills. Meanwhile, in phase F, there are four elements: historical concept skills, historical thinking skills, historical awareness, and historical research.

The E Module using Book Creator will be developed in the history subject of the independent era studied in class XI. The focus of the material that will be developed in Module E is the Proclamation of Indonesian Independence. The history subject module was developed to fulfill competencies in the history subject, which include four elements: historical concept skills, historical thinking skills, historical awareness, and historical research.

The formulation of the problem in this research includes: (1) What are the procedures and products for developing E Modules using Book Creator?; (2) How is the development of the E Module using Book Creator in the history subjects of the independent era worth learning to use?; (3) How is the development of the E Module using Book Creator in the history subjects of the independent era for practical learning?; and (4) How can the development of the E Module using the developed Book Creator effectively improve student learning outcomes in history subjects in the independent learning era?

RESEARCH METHODS

The research was conducted at SMAS Panca Budi Medan, which is located at Jalan Gatot Subroto Km 4.5 Medan, Medan Sunggal District, Medan City.

This research uses qualitative and quantitative research methods with the ADDIE model. According to Aldoobie (2015), the ADDIE model is one of the models most commonly used in the field of instructional design as a guide to producing effective designs. The ADDIE research model is very suitable for use in development-type research, with the steps of analysis, design, development, implementation, and evaluation.

Research on the development of the History E Module based on the Book Creator application can be carried out using the ADDIE research model by following the ADDIE development procedures. The historical material that will be developed in Module E is the material on the Proclamation of Indonesian Independence for class XI in phase F at the high school level.

The data collection instruments used in this research were questionnaires, interview guides, validation sheets, teacher and student response questionnaire sheets, and student learning outcomes.

The questionnaire is used to measure the level of feasibility of the E-module being developed. The questionnaire used in this research used a Likert scale with scales of 4, 3, 2, and 1 consisting of very good, good, not good, and very bad. This questionnaire will be given to an expert lecturer in the Department of History Education, a lecturer who is an expert in technology-based media, a lecturer who is an expert in learning design, and two history teachers. Apart from that, this questionnaire will also be given to three students, with small group trials for 10 students and field trials for 30 students.

Table 1. Instrument Grid for Material Experts

Aspect	Indicator
Comprehensive view	<ul style="list-style-type: none"> - The cover design depicts historical learning - Learning objectives are in accordance with learning outcomes - Attractive visualization of the Module E page design

Aspect	Indicator
	<ul style="list-style-type: none"> - E Module content framework structure - Instructions or instructions for using the E Module - E Modules are adapted to the characteristics of students - Adequate references/reading sources
Format and Writing	<ul style="list-style-type: none"> - Limitations on each subject in Module E - Everything is identified and can be read clearly - Clarity of the numbering system for each page - Systematic layout of contents in Module E - Consistency of the material presentation system in Module E - The relationship between layout and students' learning needs
Contents	<ul style="list-style-type: none"> - Suitability of material coverage with learning outcomes - The arrangement of the material is in accordance with the flow of learning objectives - Suitability of material coverage with students' learning needs - E Module content varies according to the diverse learning styles of students - Description E The module developed describes history learning - Instructions for using the E Module are clear - E Modules are developed referring to learning objectives - E The module implicitly describes student activities - Completeness of essential materials - Delivery of the final learning objectives to measure students' initial understanding - There is an initial learning assessment to measure students' initial understanding - There is a formative assessment that supports the learning process - There is a summative assessment to measure students' cognitive aspects - The assessments developed can measure students' understanding
Language	<ul style="list-style-type: none"> - Good and correct use of Indonesian - Clarity of sentences used in Module E - Ease of understanding the language in E Module - Suitability of language to students' level of thinking - The arrangement of chapters and sub-chapters in the E Module is easy to understand
Learn to be independen	<ul style="list-style-type: none"> - E Modules can be used flexibly by students - E Module is easy for students to use to learn - E Modules can be used by students to learn without teacher guidance

Table 2. Instrument Grid for Learning Design Experts

Rated aspect	Indicator
Learning Design	<ul style="list-style-type: none"> - Learning Achievement Skills - Relevance of learning objectives to Learning Outcomes - Coverage and depth of learning objectives - Suitability of material to learning outcomes - Suitability of material to students' cognitive development. - Contextuality of material - Ease of understanding the material - Accuracy in the use of presentation strategies. - Systematic consistency of material descriptions - Suitability of material and assessment - Suitability of assessment to learning objectives - Accuracy of assessment tools in learning - Providing feedback on assessment results - Learning interactivity - Complete learning media in the form of videos - Complete learning media in the form of images

	- - Contextuality and topicality of media in learning
E Module Characteristics	<ul style="list-style-type: none"> - Accuracy of the E Module structure as independent learning material for students - Consists of units that achieve complete learning outcomes - E The modules developed depend on other media - E Module adapts to developments in science and technology - E Module is easy to access and use - Suitability of various features contained in the E Module as an aid in learning

Table 3. Instrument Grid for Media Experts

Aspect	Indicator
Programming	<ul style="list-style-type: none"> - Clarity of instructions for using the E Module - Flow consistency - Continuity - System efficiency - Layout (layout) - Tools functions - E Module can be used easily
Quality (Technical/ Appearance)	<ul style="list-style-type: none"> - E Module display quality - Text readability - Selecting the type and size of letters - The letters in E Module are easy to read - Videos in E Module are easy to access - Images in E Module are easy to access - Harmonize the background color with the button placement in the E Module - Assessments in E Module are easy to access
Quality of Audio Use	<ul style="list-style-type: none"> - Video player sound - Sound and video settings - Video supports the material

Table 4. Instrument Grid for Students

Aspect	Indicator
Appearance	<ul style="list-style-type: none"> - Clarity of text - Clarity of images and videos - Attractiveness of images and videos
Presentation of Material	<ul style="list-style-type: none"> - Presentation of material in accordance with learning objectives - Clarity and simplicity of sentences - Suitability of examples to the material - Suitability of images and videos to the material
Benefit	<ul style="list-style-type: none"> - Ease of learning - Interest in using E Module - Increased learning motivation

Table 5. Test Instrument Grid for Students

Element	Learning objectives
Historical Concept Skills	<ul style="list-style-type: none"> - Identify preparations for the proclamation of Indonesian independence - Describes the Rengas Dengklok incident - Describes the events of the proclamation of Indonesian independence
Historical Thinking Skills	<ul style="list-style-type: none"> - Describe the relationship between the influence of World War II on the proclamation of Indonesian independence - Identify preparations for the proclamation of Indonesian independence - Describes the Rengas Dengklok incident - Describes the events of the proclamation of Indonesian independence
Historical Awareness	<ul style="list-style-type: none"> - Interpret the values surrounding the proclamation by writing down the lessons learned from the events of the Proclamation of Indonesian Independence

Historical Research	- Write down the events of the Proclamation of Indonesian Independence in infographic form
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Product Effectiveness

To measure this effectiveness, an experimental class and a control class were implemented. The experimental group is a group whose learning process utilizes the E module in history subjects. Meanwhile, the learning process control class does not use the E module that was developed, but only uses textbooks provided by the school. The treatment stages in the two groups can be seen in the table below.

Table 6. Product Effectiveness Treatment Design

Group	Initial Assessment	Treatment	Summative Assessment
Control	o_1	x_1	O_2
Experiment	o_1	x_2	O_2

Information:

- Control class group : Classes that do not use the E Module
- Experimental class group : Classes that use E Module
- x_1 : Treatment does not use E Module
- x_2 : Treatment using E Module
- o_1 : Initial Assessment
- o_2 : Summative Assessment

Data analysis technique

The average analysis validity criteria used in this research can be seen in the following table:

Table 7. Validity Criteria for Average Value Analysis

No	Answer	Score
1	Very Good	4
2	Good	3
3	Not Good	2
4	Very Not Good	1

(Source: Sugiyono, 2019)

The research results from each respondent calculated the average score obtained. From the results of this data analysis, the feasibility of the product being developed can be determined. This can be used as a basis for revising the product being developed. The formula for measuring data per item is, namely:

$$P = \frac{x}{x_i} \times 100\%$$

Information:

- P = percentage
- X = Respondent's answer in 1 item
- X_i = ideal value in 1 item
- 100% = constant

After measuring the data per item, the overall data is then measured using the formula:

$$P = \frac{\text{number of scores obtained}}{\text{sum of ideal scores for all items}} \times 100\%$$

To see the eligibility criteria which state that the product being developed is suitable for use, you can see the table below:

Table 8. Feasibility Percentage Scale

Percentage of Achievement	Criteria
76 – 100%	Very Eligible
56 – 75%	Eligible
40 – 55%	Enough
0 – 39%	Not Eligible

Source: Arikunto, S (2018)

The normality test is carried out to determine whether the research data is normally distributed or not. This means that the distribution of data in the population is normal or not. Testing the normality of this data uses the Chi Square formula as follows:

$$x^2 = \sum \left(\frac{(F_0 - F_h)^2}{F_h} \right)$$

Information:

x^2 = Chi Square

F_0 = Frequency obtained from the sample

F_h = Expected frequency of the sample

According to Arikunto (2018), the Chi Square value used is with a significance level of 5% and degrees of freedom equal to the number of frequency classes - 1 ($dk=K-1$). If x^2 count \leq x^2 table, then it can be concluded that the data is normally distributed.

The homogeneity test is carried out to determine whether the distribution of data in the population is homogeneous. According to Sudjana (2005), the homogeneity of variance test can be calculated using the Barlett test, namely:

$$F = \frac{s_1^2}{s_2^2}$$

If F count $<$ F table, then H_0 is accepted, and if F count $>$ F table, then H_0 is rejected. The homogeneity of variance test using the Bartlett test is an effective method for determining whether the variances of two groups of data are the same or significantly different.

Learning outcome data that has met the analysis prerequisite tests is used to test hypotheses. Hypothesis testing is carried out to determine whether the hypothesis is accepted or rejected. According to Sudjana (2005), the research hypothesis to be tested is:
 $H_0: \mu_1 = \mu_2$ $H_a: \mu_1 > \mu_2$

Description:

μ_1 = average student learning outcomes using the History E Module

μ_2 = average learning outcomes of students who do not use the History E Module

H_0 = there is no difference in the learning outcomes of students using the E History Module and those who do not use the E History Module

H_a = there is a difference in the learning outcomes of students using the E History Module and those who do not use the E History Module

To test the hypothesis, a two-party test formula is used

$$t = \frac{\bar{x}_1 - \bar{x}_2}{s \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

Where s is the root of the combined variance calculated by the formula:

$$s^2 = \frac{(n_1-1)s_1^2 + (n_2-1)s_2^2}{n_1+n_2-2} \quad \text{Where} \quad s = \sqrt{s^2}$$

Information:

\bar{x}_1 = average score of the experimental class

\bar{x}_2 = average score of the control class

n_1 = average number of experimental classes

n_2 = average number of control classes

s_1^2 = experimental class group variance

s_2^2 = control class group variance

s = combined variance

r = calculation price

The test criteria are accepted as H_0 if $t_{count} > t_{table}$ obtained from the t distribution list with $dk = (n-1)$ with a significance level of $\alpha = 5$. According to Sugiyono (2019), to see the effectiveness value of the product being developed, the researcher can compare the effectiveness obtained with the ideal effectiveness, which can be formulated as follows:

$$x = \frac{\text{obtained effectiveness score}}{\text{ideal effectiveness score}} \times 100\%$$

The effectiveness assessment can be seen in table 9 below:

Table 9. Criteria for assessing the effectiveness of the History E-Module

Mark	Percentage of Achievement	Criteria
4	76 – 100%	Very Eligible
3	56 – 75%	Eligible
2	40 – 55%	Enough
1	0 – 39%	Not Eligible

(Source: Sugiyono, 2019).

To determine whether there is an increase in learning outcomes, the normalized gain (N-Gain) formula can be used as follows:

$$N - Gain = \frac{\text{summative score} - \text{initial assessment score}}{\text{maximum score} - \text{initial assessment score}} \times 100\%$$

Description:

N-Gain = Presentation of increased learning outcomes

N initial assessment = Initial assessment value

N summative = Summative value

N max = Maximum value

Decision making in this test can be seen in the following table:

Table 10. Distribution of Gain Scores

N-Gain Value	Category
$g > 0,7$	High
$0,3 \leq g \leq 0,7$	Medium
$g < 0,3$	Low

Source: Guntara (2021)

Table 11. Categories of Interpretation of N-Gain

Percentage (%)	Interpretation
< 40	Not effective
40 – 55	Less Effective
56 – 75	Moderately Effective
76 – 100	Effective

Source: Hakke (in Hartati, 2016)

RESULTS AND DISCUSSION

The appropriateness of presentation, appropriateness of content, construction and language of learning media were validated by several experts. The data obtained from validation results from experts are as follows:

Table 12. Expert Validation Results of Research Instruments

No.	Aspects Assessed	Score	(%)	Criteria
A	Feasibility of Presentation			
1	Presentation of instrument instructions is easy to understand	3	75%	Eligible
2	Clarity in scoring presentation	3	75%	Eligible
B	Eligibility of Content			
3	The instrument statement items are in accordance with needs and problems	4	100%	Very Eligible
4	Conformity of the sequence of instrument statements with needs and problem analysis	3	75%	Eligible
C	Construction			
5	<i>The layout in the needs and problem analysis assessment instrument has been completed</i>	4	100%	Very Eligible
6	The letters in the needs and problem analysis assessment instrument are easy to read	4	100%	Sangat Layak
D	Language			
7	The formulation of the needs and problem analysis assessment instrument statement uses the correct spelling	3	75%	Eligible
8	The language formulation of the needs and problem analysis assessment instrument uses the correct spelling	4	100%	Very Eligible
	Rata-Rata		87,5 %	Very Eligible

Based on the validation of the research instruments carried out, the results obtained were 87.5% of the instruments were very good. Thus, the research instrument is very suitable for use in research.

Table 13. Material Expert Validation Results

No.	Aspects/Indicators Assessed	Score	(%)	Criteria
I	Comprehensive View			
1	Cover design depicts history learning	4	100%	Very Eligible
2	Learning objectives are appropriate to learning outcomes	3	75%	Eligible
3	Attractiveness of page design visualization E Module	4	100%	Very Eligible
4	Content framework structure E Module	3	75%	Eligible
5	Instructions or instructions for using E Module	4	100%	Very Eligible
6	E Module adapted to student characteristics	4	100%	Very Eligible
7	Adequate references/reading material sources	3	75%	Eligible
II	Format and Writing			
8	Limitations on each subject in E Module	3	75%	Eligible
9	All are identified and can be read clearly	4	100%	Very Eligible

No.	Aspects/Indicators Assessed	Score	(%)	Criteria
10	Clarity of the numbering system for each page	4	100%	Very Eligible
11	Systematic content layout in E Module	3	75%	Eligible
12	Consistency of material presentation system in E Module	3	75%	Eligible
13	Relationship between layout and students' learning needs	4	100%	Very Eligible
III	Contents			
14	Conformity of material coverage with learning outcomes	4	100%	Very Eligible
15	The arrangement of the material is in accordance with the flow of learning objectives	4	100%	Very Eligible
16	Suitability of material coverage with students' learning needs	4	100%	Very Eligible
17	E Module content varies according to students' diverse learning styles	4	100%	Very Eligible
18	Description E The module developed describes history learning	4	100%	Very Eligible
19	Instructions for using E Module are clear	3	75%	Very Eligible
20	E The module was developed referring to learning objective	4	100%	Very Eligible
21	E Module implicitly describes student activities	3	75%	Eligible
22	Completeness of essential materials	4	100%	Very Eligible
23	Delivery of the final learning objectives in accordance with the elements in history learning	4	100%	Very Eligible
24	There is an initial learning assessment to measure students' initial understanding	4	100%	Very Eligible
25	There is a formative assessment that supports the student's learning process	4	100%	Very Eligible
26	There is a summative assessment to measure the cognitive aspects of students	4	100%	Very Eligible
27	The assessment developed can measure students' understanding	4	100%	Very Eligible
IV	Language			
28	Good and correct use of Indonesian	4	100%	Very Eligible
29	Clarity of sentences used in E Module	4	100%	Very Eligible
30	Ease of understanding language in E Module	4	100%	Very Eligible
31	Suitability of language to students' level of thinking	4	100%	Very Eligible
32	The arrangement of chapters and sub-chapters in E Module is easy to understand	4	100%	Very Eligible
V	Belajar Mandiri			
33	E Module can be used flexibly by students	4	100%	Very Eligible
34	E Module is easy for students to use to learn	4	100%	Very Eligible
35	E Modules can be used by students to learn without teacher guidance	3	75%	Very Eligible
	Average		90,7%	Very Eligible

Overall, the material expert validation results obtained an average score of 90.7% with very good criteria. Thus, the E Module using Book Creator in the History subject of the independent learning era has met the eligibility requirements in the material aspect.

Media expert validation, the aspects or indicators assessed are programming, quality (technical/appearance), and quality of audio use. The following are the results of the material validation carried out:

Table 14. Media Expert Validation Results

No.	Aspects/Indicators Assessment	Score	(%)	Criteria
I Programming				
1	Clarity of instructions for using E Module	4	100%	Very Eligible
2	Flow consistency	4	100%	Very Eligible
3	Sustainability	3	75%	Eligible
4	System efficiency	3	75%	Eligible
5	Layout	3	75%	Eligible
6	Function tools	4	100%	Very Eligible
7	E Module can be used easily	4	100%	Very Eligible
II Quality (Technical/Appearance)				
8	E Module 4 display quality	4	100%	Very Eligible
9	Text readability	4	100%	Very Eligible
10	Selection of font type and size	3	75%	Eligible
11	Letters in E Module easy to read	4	100%	Very Eligible
12	Videos in E Module easy to access	4	100%	Very Eligible
13	Images in E Module easy to understand	4	100%	Very Eligible
14	Background color harmony with tool placement in E Module	4	100%	Very Eligible
15	Assessment in E Module is easy to access	4	100%	Very Eligible
III Quality of Audio Use				
16	Video player sound	4	100%	Very Eligible
17	Sound and video settings	3	75%	Eligible
18	Videos supporting material	4	100%	Very Eligible
	Average		93,1%	Very Eligible

Overall, the validation results obtained an average score of 93.1% with very good criteria. Thus, the E Module using Book Creator in the History of the Independent Learning Era subject has met the eligibility requirements in the media aspect.

Validation of learning design experts and E Module characteristics. The following are the results of the material validation carried out:

Table 15. Design Expert Validation Results

No.	Aspects/Indicators Assessment	Score	(%)	Criteria
I Learning Design				
1	Skill Learning Outcome	4	100%	Very Eligible
2	Relevance of learning objectives to learning outcomes	4	100%	Very Eligible
3	Scope and depth of learning objectives	4	100%	Very Eligible
4	Suitability of material to learning outcomes	4	100%	Very Eligible
5	Suitability of material to students' cognitive development	3	75%	Eligible
6	Contextuality of material	3	75%	Eligible
7	Ease of understanding the material	4	100%	Very Eligible
8	Accuracy of using presentation strategies	3	75%	Eligible
9	Systematic consistency of material description	3	75%	Eligible
10	Suitability of material and assessment	3	75%	Eligible
11	Conformity of assessment to learning objectives	3	75%	Eligible
12	Accuracy of assessment tools in learning	3	75%	Eligible
13	Providing feedback on assessment results	3	75%	Eligible
14	Learning interactivity	4	100%	Very Eligible
15	Completeness of learning media in the form of videos	4	100%	Very Eligible
16	Completeness of learning media in the form of images	4	100%	Very Eligible
17	Contextuality and actuality of media in learning	4	100%	Very Eligible
II Characteristics of E Module				
18	Accuracy of E Module structure as independent learning	4	100%	Very Eligible

No.	Aspects/Indicators Assessment	Score	(%)	Criteria
	material for students			
19	Consists of units that achieve complete learning outcomes	3	75%	Eligible
20	E The module developed depends on other media	3	75%	Eligible
21	E Module adapts to developments in science and technology	3	75%	Eligible
22	Easily accessible e-module	3	75%	Eligible
23	Suitability of various features contained in E Module as an aid in learning	3	75%	Eligible
	Average		86%	Very Eligible

Overall, the design expert validation results obtained an average score of 85.9% with very good criteria. Thus, the E Module using Book Creator in the History subject of the independent learning era has met the eligibility requirements in the design aspect.

The overall assessment from expert validation regarding the E Module using Book Creator in the History subject of the independent learning era is that it meets the eligibility requirements and the accumulated assessment can be seen in the following table:

Table 16. Design Expert Validation Results

No.	Validator	%	Category
1	Material Expert	90,7	Very Eligible
2	Media Expert	93,1	Very Eligible
3	Design Experts	86%	Very Eligible
	Rata-Rata	90%	Very Eligible

The results of eligibility validation by subject teachers can be seen in the table below:

The results of the assessment of the field trials can be seen in the table below:

Table 17. Field Test Results

No.	Aspects/Indicators Assessment	Score	(%)	Criteria
I	Criteria			
1	Clarity of text	115	95,8	Very Eligible
2	Clarity of images and videos	115	95,8	Very Eligible
3	Attractiveness of images and videos	115	95,8	Very Eligible
II	Material Study			
4	Presentation of material in accordance with learning objectives	120	100	Very Eligible
5	Clarity and simplicity of sentences	116	96,7	Very Eligible
6	Suitability of examples to material	117	97,5	Very Eligible
7	Conformity of images and videos with material	117	97,5	Very Eligible
III	Benefits			
8	Ease of learning	118	98,3	Very Eligible
9	Interest in using E Module	118	98,3	Very Eligible
10	Increased learning motivation	118	98,3	Very Eligible
	Average		97,4	Very Eligible

Table 18. Summary Results of Percentage of Respondent Categories

No.	Respondents	Average Percentage	Criteria
1	Material Expert	90,7	Very Eligible
2	Media Expert	93,1	Very Eligible
3	Design Experts	86	Very Eligible
4	Eligibility Test by Teacher	91,1	Very Eligible
5	Individual Trials	92,5	Very Eligible
6	Small Group Trials	93,75	Very Eligible
7	Field Trials	97,4	Very Eligible
	Average	92,07	Very Eligible

The results of practical validation by students in the experimental class can be seen in the table below:

Table 19. E Module Practicality Test Results by Experimental Class Students

No.	Aspects/Indicators Assessment	Score	(%)	Criteria
I Criteria				
1	Clarity of text	115	95,8	Very Practical
2	Clarity of images and videos	115	95,8	Very Practical
3	Attractiveness of images and videos	115	95,8	Very Practical
II Material Study				
4	Presentation of material in accordance with learning objectives	120	100	Very Practical
5	Clarity and simplicity of sentences	116	96,7	Very Practical
6	Suitability of examples to material	117	97,5	Very Practical
7	Conformity of images and videos with material	117	97,5	Very Practical
III Benefits				
8	Ease of learning	118	98,3	Very Practical
9	Interest in using E Module	118	98,3	Very Practical
10	Increased learning motivation	118	98,3	Very Practical
	Rata-Rata		97,4	Very Practical

The calculation of scores for all categories of practicality test respondents can be seen in the following table:

Table 20. Summary of Practicality Test Percentage Results

No.	Respondents	Average Percentage	Criteria
1	History Subject Teacher	91,1	Very Practical
2	Students	97,4	Very Practical
	Average	94,25	Very Practical

Obtaining data on student learning outcomes using the E Module in history learning at SMAS Panca Budi Medan obtained the lowest score of 80 and the highest score of 100. The average score was 92.93, the mode was 92, the median was 92, the standard deviation was 5.53 , variance 30.55, upper limit 23.33, average limit 33.33, and lower limit 43.33. An overview of student learning outcomes using the E Module can be seen in the following table:

Table 21. Frequency Distribution of Learning Outcomes of Experimental Class Students

No.	Class Interval			fi	Xi	fiXi	Xi ²	fiXi ²	fi relative
1	80	-	83	2	81,5	163	6642,25	13284,5	6,67
2	84	-	87	1	85,5	85,5	7310,25	7310,25	3,33
3	88	-	91	4	89,5	358	8010,25	32041	13,33
4	92	-	95	10	93,5	935	8742,25	87422,5	33,33
5	96	-	99	7	97,5	682,5	9506,25	66543,8	23,33
6	100	-	103	6	102	609	10302,3	61813,5	20,00
Total				30	549	2833	50513,5	268416	100

Based on table 21, it can be seen that the learning outcomes of students using the E Module with 10 students are at the middle limit of the average, namely 33.33% and 13 students (43.33%) have scores above it.

Data on the learning outcomes of control class students who studied using textbooks in history subjects found that the learning outcomes scores of class 86.93 with a module score

of 80, median 86, standard deviation 7.04, variance 49.58, upper limit 50, middle limit average 16.67 and lower limit 33.33. An overview of student learning outcomes using the E Module can be seen in the following table:

Table 22. Frequency Distribution of Learning Outcomes of Control Class Students

No.	Class Interval			fi	Xi	fiXi	Xi ²	fiXi ²	fi relative
1	72	-	76	1	74	74	5476	5476	3,33
2	77	-	81	8	79	632	6241	49928	26,67
3	82	-	86	6	84	504	7056	42336	20,00
4	87	-	91	5	89	445	7921	39605	16,67
5	92	-	96	8	94	752	8836	70688	26,67
6	97	-	101	2	99	198	9801	19602	6,67
Total				30	519	2605	45331	227635	100

Based on table 22, it can be seen that the learning outcomes of students using printed books can be seen that 5 students are at the middle limit of the average, namely 16.67% and 10 students (33.33%) have scores above it. Overall results can be seen in the statistical description table below:

Tabel 23. Deskriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Posttest_Experiment	30	80,00	100,00	92,9333	5,52695	30,547
Posttest_Control	30	72,00	100,00	86,9333	7,04142	49,582
Valid N (listwise)	30					

Test Data Analysis Requirements

To test the data analysis requirements in this research, the tests carried out were normality tests and homogeneity tests. The results of the normality test using Kolmogorav Smirnov show that the value of Asymp. Sig. (2-tailed) is 0.085, where $0.085 > 0.05$. Therefore, it can be concluded that the data is normally distributed and meets the requirements of the normality test. homogeneity test, if the Sig value. Based on a mean > 0.05 , Based on table 24, it was found that the learning outcomes for the control class and experimental class were based on a mean sig value of 0.88. Sig $0.88 > Sig 0.05$. It can be concluded that the learning outcomes of the control class and the experimental class are homogeneous.

Hypothesis testing

Hypothesis testing is carried out to see the effectiveness of the research conducted:

Table 24. Hypothesis Test Results

Independent Sampels Test									
Levene's Test for Equality of Variances			t-test for Equality of Means						
F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
							Lower	Upper	

Hasil Belajar	Equal variances assumed	3,013	0,088	-3,671	58	0,001	-6	1,634	-9,271	-2,729
	Equal variances not assumed			-3,671	54,902	0,001	-6	1,634	-9,275	-2,725

Based on table 24 above, Sig data is obtained. (2-tailed) of 0.001, where $0.001 < 0.05$. This can be interpreted that H_0 is rejected and H_a is accepted.

The N-Gain test was carried out to test effectiveness by comparing the pretest and posttest results from the experimental class and control class:

Table 25. N-Gain Test Results

Descriptives						
	Class			Statistic	Std. Error	
NGain_Persent	Control Class	Mean			69,1931	3,45718
		95% Confidence Interval for Mean	Lower Bound		62,1224	
			Upper Bound		76,2638	
		Skewness			-0,563	0,427
		Kurtosis			0,641	0,833
	Experimental Class	Mean			83,3322	2,34483
		95% Confidence Interval for Mean	Lower Bound		78,5365	
			Upper Bound		88,1279	
		Skewness			-0,602	0,427
		Kurtosis			0,159	0,833

Based on the N-Gain test results in table 4.19, it can be seen that the average N-Gain Score for the control class is 69.1931 or 69.19%, which is quite effective. Meanwhile, the average N-Gain Score for the experimental class was 83.33 or 83.33%, including effective.

Discussion

Implementing learning using the E Module developed with Book Creator is able to facilitate students' learning styles and interests, thereby having an impact on improving learning outcomes. Freedom to learn as freedom to think and develop oneself. To achieve this, students need an independent attitude. Thus, it is hoped that independent learning will be able to grow students as independent learners. Modules developed with various types of content are able to facilitate the diverse learning needs of students. Attractive and easy-to-use tools provide students with comfort in learning, so they can learn independently. Therefore, it is not surprising that the use of the E module in history learning is able to improve student learning outcomes.

The development of the E Module with Book Creator in the History Subject of the Independent Learning Era has met the feasibility criteria from various aspects, namely feasibility in terms of material, feasibility in terms of media, and feasibility in terms of design. The percentage gain from the three validations carried out was 90%. This is because the development of the E Module contains material that is in line with the achievements and objectives of learning history in the material on the Proclamation of Indonesian Independence. Apart from that, the media used is varied, so it is interesting to use in learning. The E Module is also well designed; the color display, layout, font type, and size are very well developed.

According to Mustami (2017), teaching materials are said to be appropriate if they achieve validation results, where the preparation of the E Module refers to learning

objectives and material descriptions according to learning competencies. This is also in line with research conducted by Kalimatus Sa'diyah with the title "Development of an E-Digital Flipbook-Based Module to Facilitate Distance Learning in High Schools." (Sa'diyah, 2021). From this research, data showed that the development of a digital Flipbook-based E-module was theoretically feasible with a validation result of 0.91, including the valid and empirically feasible categories.

The practicality of the E Module using Book Creator in the History of the Independent Learning Era subject can be seen from the users of the E Module in learning. The developed module is used by history teachers and class XI students. The assessment carried out includes three aspects, namely the content suitability aspect, the technical/appearance quality aspect, and the benefits aspect. From these three aspects, an average score of 91.1% was obtained from teacher users and 92.5% from student users through individual tests. Overall, the average percentage of practicality from users is 91.8%, in the Very Good category. In detail, 100% stated that it was easy to learn by using the E Module.

According to Mustami (2017), teaching materials can be said to be practical if they meet the criteria, namely (1) the tools developed can be determined according to expert assessments, and (2) the tools developed can be applied in real terms in the field. In other words, the E Module can be said to be practical if it can be used in learning by students according to their learning needs.

The results of this research are relevant to research conducted by Sidiq and Najuah (2023), with the research title "Development of Android-Based Interactive E-Modules in Teaching and Learning Strategy Courses." From the research conducted, the average student pre-test score was 61, and the average post-test score was 86. There was an increase in student learning outcomes after using the E Module.

In line with the research results of Nieveen (1999), effectiveness is the quality of the learning tools developed in terms of students' appreciation for learning, in this case, the level of effectiveness of the teaching materials developed can be seen from the students' learning outcomes.

Based on the explanation above, it can be concluded that the development of the E Module using Book Creator in the History of the Independent Learning Era subject at SMAS Panca Budi Medan is feasible, practical, and effective for use in learning. The development carried out has advantages and disadvantages. The advantages of developing E-modules using Book Creator in the History Subject of the Independent Learning Era at SMAS Panca Budi Medan are: (1) E-modules contain various types of content that can facilitate students' learning needs and interests. In the E Module, content is not only in written form, but also in the form of images, concept maps, power points, videos, articles, and other learning resources that students can explore easily. In this way, the E Module can increase students' interest in learning, and (2) the E Module is easy to access and use. There is a way to use the E Module; the tools in the E Module also function well and are easy to use. E-modules can be used by students anytime and anywhere as long as they are connected to the internet. In this way, the use of E-modules can increase students' independent learning activities, (3) The attractive appearance of E-modules can attract students' attention so they can learn and easily understand what is being said. presented in the E-Module.

CONCLUSION

The conclusions that can be put forward are as follows:

1. Research using the ADDIE model and utilizing the Book Creator application produces products in the form of history teaching materials that contain various media in the form of E Modules that can be used in learning history in the independent learning era.
2. The results of the product feasibility test show that the E Module using Book Creator in the History subject of the independent era of learning is very suitable for use in the History learning process at SMAS Panca Budi Medan.
3. The E Module uses Book Creator in the History subject of the independent era. Practical learning is used in history learning at SMAS Panca Budi Medan.
4. The results of the E Module effectiveness test using Book Creator in the History subject of the independent era studying at SMAS Panca Budi Medan show effective results with an increase in student learning outcomes.

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