



Certificate

No. 1451 /UN.33.8/II/2022

Presented to :

ROSMAIDA SINAGA

as

PRESENTER

(ABS-118)

at

The 4th International Conference on Innovation in Education, Science and Culture (ICIESCE)

Theme:

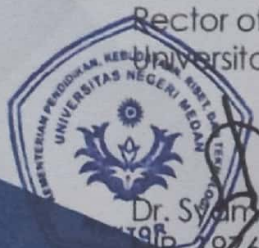
Education and Science in time of uncertainty: Recovering for the Future

11 October 2022

Institut of Research and Community Service (LPPM)

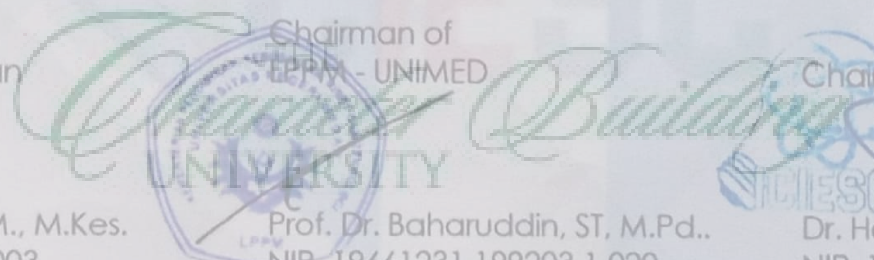
Universitas Negeri Medan, Indonesia.

Rector of
Universitas Negeri Medan



Dr. Syamsul Gultom, SKM., M.Kes.
NIP. 19760513 200012 1 003

Chairman of
LPPM - UNMED



Prof. Dr. Baharuddin, ST, M.Pd.,
NIP. 19661231 199203 1 020

Chairperson of ICIESCE 2022



Dr. Hesti Fibriasari, M.Hum
NIP. 19790208 200212 2 002

Development of Indonesian History Digital Book Application Based on Hots Literacy as a Portable Teaching Media in The History Education Department

Rosmaida Sinaga¹, Tappil Rambe²

{rosmaidasinaga@unimed.ac.id¹, tappilrambe@unimed.ac.id²}

Department of History, Faculty of Social Science, Universitas Negeri Medan, Indonesia^{1,2}

Abstract. This research is motivated by the importance of developing applications for Indonesian history e-books for students of history education, which has a limited number. This literature is increasingly needed, especially during the MBKM Curriculum in the R.I 4.0 Era. It is hoped that this product will increase student learning independence in the hybrid learning system in the current pandemic era. This study uses the Research and Development (R&D) method developed by Borg and Gall (2010). Data was collected using a questionnaire, observation, and interviews. The research instrument was tested using content validity. The data analysis technique used quantitative and qualitative descriptive. The literature developed refers to the development stage of Borg and Gall which is grouped into four stages, namely preliminary study, development, field testing, as well as product dissemination, and socialization. Literature that is developed quantitatively and qualitatively is expected to be feasible to apply in history learning, especially Indonesian history.

Keywords: Indonesian History, Digital book, Hots Literacy.

1 Introduction

Every teacher, especially lecturers, has to have access to essential teaching supplies. In light of the advancement of science and the numerous new discoveries resulting from scientific study, it is imperative that every lecturer create current teaching materials. This is corroborated by Hamid Hasan's [1] assertion at the 2017 APPS seminar that the presenters' own scientific research yields the most current teaching materials. Another indicator of the growth of a topic or study is the availability of instructional resources.

In order to identify, create, and assess learning content and strategies, instructional materials are developed. The kind of instructional materials being developed, the quantity of pupils, and the availability of materials are all taken into account. The flexibility principle is used in the creation of educational materials. The ability to accept new ideas that were not already part of the course's content at the time it was implemented is a key component of the flexibility principle [2]. The flexibility principle states that through lectures given by lecturers, students might

embrace new contextual values or competencies. The learning process identified by the semester learning implementation plan can help students develop these competencies (RPS). The achievement of learning outcomes is supported by the effectiveness of the implementation of the learning process with the planning of the learning process. Conducting research and development is one strategy that may be utilized to create contextual and results-focused instructional materials.

A new product or an improved version of an existing product that can be accounted for are the goals of research and development. The end outcome can take the shape of software or intangible items rather than having to be physical hardware (software). The end result (in the realm of education) might take the shape of lesson plans, books, worksheets, questions, or other learning tools like these. It can also take the form of the application of learning theory by integrating the creation of learning tools. [3]

In this instance, researchers will study Indonesian history courses at the Department of History Education FIS UNIMED while developing Indonesian history digital book applications. This is driven by the postmodernist development of historical learning theory and how epic historical narratives are now frequently linked to literacy hot topics like critical thinking, problem-solving, and writing skills [4]. The conditions of the world of education, which has now attained an R.I. of 4.0, are becoming more and more appropriate for this Literacy Hots method.

One of the required subjects in the MBKM History Education Curriculum for Higher Education is Indonesian history. However, especially for courses that are digitally based, it is uncommon to find material to accompany these courses. The only literature that is Grand Narrative, which is worthless and primarily consists of cause-and-effect stories, is what is readily available on the market. Even though the Indonesian History material is chock-full of morals and skills, Hots Literacy in particular has the potential to be assimilated by pupils, especially in light of the current global rivalry. Students unquestionably require literature that is based on Hots Literacy in order to develop life skills in accordance with the requirements of MBKM [5].

The content on Indonesian history holds a significant place in the middle school curriculum, just like it does in universities. The absence of supporting literature that can serve as a foundation for the creation of history teaching materials in secondary schools, however, continues to be an issue in the development of Indonesian history education. In order to maximize the accomplishment of the goals of the history curriculum in middle schools and the history education curriculum in higher education, Indonesian history literature based on Literacy Hots must be developed [6].

2 Method

The research and development technique was applied in this study. The development research method is a technique used to create specific goods and evaluate their efficacy [7]. Research and development is a process or series of stages that can be accounted for in the development of new products or the improvement of existing ones [8].

The research and development (R&D) paradigm proposed by Borg and Gall [8] is used in this application development process. The stages of the R&D development model are as follows: a)

the needs analysis stage, which entails student analysis, material analysis, and goal specification; b) the design phase of teaching materials products, which entails teaching material selection and initial design; c) the production/implementation stage of initial product development, which entails the production of teaching materials and the preparation of assessment instruments (validation sheets, questionnaires/quators). d) the validation stage, which includes evaluations from material experts (Historical Education Lecturers) and design experts (Historical Education Lecturers); e) the revision stage, which includes media revisions or improvements based on suggestions by the validators; f) the product testing phase, which includes testing the material on students, having students complete questionnaires, and implementing learning outcomes tests; g) the final revision and dissemination. The effectiveness test is the last stage of this investigation [9].

3 Results and Discussion

3.1 Analysis Stage

Analyzing some of the required requirements is the first step in developing this material. To serve as a guide in the creation of digital books, these demands include user determination and material selection.

1) User (user)

Students from the Department of History Education at the Faculty of Social Sciences, State University of Medan, are the intended users of the produced Digital Book Application. According to interviews with a number of students, learning on mobile devices (such as smartphones) is very engaging for them and can support independent learning whenever and whenever. According to data from a preliminary study by academics that involved observations and interviews, the typical student has an Android smartphone, which of course allows access to newly developed digital books.

2) Material Needs

The learning materials for the Indonesian History course are the ones being discussed here. The researcher then presents students with a number of learning themes she has prepared before conducting interviews. Based on the requirements they faced in the lectures, students were asked to rate how significant these issues were to them. The researcher wanted to know how crucial it was for students to learn the supplied material in order to advance their skills in Indonesian history. [10]

Students also require educational materials to be provided on the Digital Book application. According to data gathered by researchers, the typical student believes that audio and video content are crucial for teaching Indonesian history. Therefore, the researchers will offer a number of additional features, such as practice questions and films connected to the Indonesian History course, to address the needs of students. The movie that is being shown is one regarding occurrences or symptoms connected to the topic of the course on Indonesian history, and it will be used as the basis for student projects in that course.

3.2 Product Design Phase (Design)

The development of project-based research method teaching materials and the development of the digital book application for Android-based research method teaching materials are the two aspects of the research's product design for the digital book application, respectively [11].

1. Development of Project-Based Learning Research Methods.

At this point, the researcher creates instructional materials based on the following elements of the project-based learning model:

(a) Authentication.

The projects that students will complete in relation to the real-world issues that are, of course, connected to CPM are included in the teaching materials for the Indonesian History course established in this study. In this part of the lesson, students are guided to be able to solve issues or questions that are meaningful to them, to use issues or questions that they encounter in the real world, and to create something that has historical significance for themselves or for the community.

(b) Maintaining academic rigor.

Students are challenged to complete a project utilizing the inquiry technique in the educational materials created for them.

(c) Expert relationships (expert relationship). The inclusion of experts or experts from outside the classroom is the secret to the effectiveness of project-based learning. Some of the designed educational materials call for students to be able to communicate with professionals in order to address issues pertaining to the project they must finish. [12]

(d) Active study (active exploration). Every topic and subtopic in the instructional materials is intended to motivate students to actively engage in research, discover, analyze, and present project outcomes.

The researchers conducted interviews and sought feedback from their professors, who were thought to be authorities in instructional design and learning models, when creating these teaching materials.

1) The initial design of products for digital book applications.

The next step is to develop a product in the form of a Digital Book Application after the stages of analysis and project-based learning-based textbook production. The front-end design, or the design for users (students taking the Indonesian History course), and the back-end design, or the design for administrators, or the design for lecturers so that they can update at any time, make up the initial design of the Android-based Digital Book Application product. created a digital book app.

2) Design of the digital book application display.

(a) Initial Application Screen

After a user accesses an application, they are presented with the initial view (login). The user must enter their user name and password in the two fields that are required on the display.

The lecturer, who also serves as the admin for this digital book application, will offer a password to each student who has signed up to take the Indonesian History course.

(b) Front View Design

After the learner has successfully completed the Login stage, the front screen is the display that appears. A menu can be found on the front screen. Digital book application items are shown on the "About" menu in the first menu, which is also a menu. The third menu, "6 assignments," will display items under menu 6 of the KKNI. The menu "Materials" contains materials and sub-materials that will be discussed in lecture activities. RPS is found on the fourth menu.

c) "Home" Display Design

The "Home" menu is a menu that includes information about the Digital Book Application, such as: 1) the name of the Digital Book Application, 2) its goal, and 3) how to use the Digital Book Application.

d) The "Home" sub-Material Menu's Display Design.

The teaching materials in the online edition of the Indonesian History course, both in written form and in the form of images and videos, are displayed in a display called the material menu. Students can download the RPS (Semester Learning Plan) and PowerPoint slides from this menu.

e) Task Display Design.

This digital book application is made to assist the blended learning approach in addition to the six goals specified by the KKNI curriculum that is applicable to Medan State University. There is a thorough explanatory display of the 6 tasks that students must complete on the 6 task menu.

3.3 Product Development Phase (Development)

The creation of the Digital Book Application is in the development stage. This Digital Book Application was created with the design in mind. First, the content-filling elements for this digital book application—such as pictures, videos, and animations—are gathered. Google, YouTube, and electronic books are used to find these resources.

3.4 Implementation Phase (Implementation)

Trials of products that have been created for a number of respondents are included in the implementation phase. The researcher creates a blended learning scenario as part of the implementation [13]. The four meetings that made up the blended learning implementation for the lectures on Indonesian history included two face-to-face meetings and two online meetings using Zoom and Dendroid web meetings. The learning media expert and the material expert were the two specialists the researcher asked to evaluate the Digital Book Application product during the trial [14].

3.5 Student Interest in Android-Based Learning

Students were asked to complete a response questionnaire by giving an assessment of each indicator by putting a check mark (✓) on the range of numbers that are considered appropriate, namely (4) to strongly agree, (3) to agree, (2) to disagree, and (1) to disagree. This was done in order to determine students' interest in learning the Research Methods course using the Android Digital Book Application based on Literacy Hots. The percentage of values received from each aspect, calculated from the results of the questionnaire, was then used to further analyze the data [15]. To do this, the total value of each aspect was divided by the maximum number and multiplied by 100%.

According to the results of the student response survey, the percentages for features of student happiness, interest in utilizing applications, attentiveness, and involvement were 86.49%, 87.67%, 85.81%, and 88.24%, respectively. It is clear from the four elements that students have a highly positive attitude toward learning, and it can be inferred that they are very interested in using the produced Digital Book Application to study.

4 Conclusion

The Literacy Hots-based Digital Book application that was developed can be one of the effective learning media for students and help teachers in learning Indonesian history. The Hybrid Learning model will certainly be more effective when coupled with the use of the Digital Book Application. In addition, the use of the Digital Book Application can stimulate students in developing a learning and independent culture and also increase students' Literacy Hots abilities.

References

- [1] Amri, S. (2013). *Pengembangan dan Model Pembelajaran dalam kurikulum 2013*. Jakarta: Prestasi Pustaka.
- [2] Arsyad, Azhar. (2011). *Media Pembelajaran*. Jakarta: Rajagrafindo Persada.
- [3] Darmadi, H. (2011). *Metode Penelitian Pendidikan*. Bandung: Alfabeta.
- [4] Darmawan, D. (2014). *Pengembangan E-Learning Teori dan Desain*. Bandung: PT Remaja Rosdakarya.
- [5] Effendi, Empy dan Hartono Zhuang, (2005). "E-learning Konsep dan Aplikasi". Penerbit: Andi Offset. Yogyakarta.
- [6] Hobri. (2009). *Metodologi Penelitian dan Pengembangan (Developmental Research) (Aplikasi pada Penelitian Pendidikan Matematika)*. Jember: FKIP Universitas Jember.
- [7] Kadir. (2015). *Statistika Terapan*. Jakarta: Raja Grafindo Persada.
- [8] Lehman, Lynn. (2007). *A Proactive Approach to Employee Training & Development*. Rising Sun Consultants.
- [9] Miarso, Yusufhadi. (2007). *Menyemai Benih Teknologi Pendidikan*. Jakarta: Kencana Prenada Media Group.
- [10] Muhtadi, Ali. (2013). *Pemanfaatan Program Computer Assisted Instruction (CAI) dalam Program Pembelajaran Berbasis Internet*. Universitas Negeri Yogyakarta. Diakses pada tanggal 6 Desember 2013.
- [11] Munadi, Y. (2013). *Media Pembelajaran Sebuah Pendekatan Baru*. Jakarta Selatan: Referensi.
- [12] Nasution, Abd Haris. (2021). *Pembelajaran Sejarah abad 21*. Obelia Publisher: Medan.
- [13] Sadiman, Arief S. (2010). *Media Pendidikan*. Jakarta:RajaGrafindo Persada.

[14] Sugiyono, P. D. (2017). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Bandung: Alfabeta.

[15] Supriatna, Nana. (2007). Komstruksi Pembelajaran Sejarah Kritis. UPI Press: Bandung.



THE
Character Building
UNIVERSITY