E-Module Development of African History based on Ecopedagogy as A Digital Learning Media for Students Department of History Education

Ponirin[1], Arfan Diansyah[2]

(ponirin@unimed.ac.id[1], arfandiansyah@unimed.ac.id[2])

Departement of History, Faculty of Social Science, Universitas Negeri Medan, North Sumatera, Indonesia[1,2]

Abstract. This research is motivated by the importance of developing Ecopedagogy-Based African History literature as a digital learning medium for History Education Students. 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 and students' understanding of nature conservation to prevent humans from natural disasters and pandemics. This research employs Borg and Gall's Research and Development (R&D) technique (2010). A questionnaire, observations, and interviews were used to collect data. The content validity of the study instrument was examined. The quantitative and qualitative descriptive data analysis techniques were applied. The literature generated pertains to Borg and Gall's development stage, which is divided into four stages: basic investigation, development, field testing, product diffusion, and socialization. Literature that has been created statistically and qualitatively is believed to be applicable in history education, particularly in African history.

Keywords: E-Module, African History, Ecopedagogy

1.   Introduction

Education encompasses all learning experiences that occur in all situations and endure throughout a person's life. Education, in its broadest sense, refers to formal educational institutions such as schools [1]. This differs from the viewpoint of psychologists, who regard education as the impact of adults on immature youngsters in order for them to have flawless talents and complete knowledge of their social interactions and societal obligations [2].

The quality of the results of achieving educational goals depends on the ongoing educational process, the process is influenced by the quality of the components and the quality of management, so the two aspects are interdependent [3]. If these components are adequate but not supported by good management, the achievement of educational goals will not be achieved optimally. Vice versa, if the management is good and the conditions are lacking, the results are not optimal. So the main objective of managing the educational process is the occurrence of an optimal learning process and learning experience to produce maximum learning outcomes [4].

Efforts must be made to increase the quality of student learning outcomes at all levels of education in order to obtain high-quality Indonesian human resources to support national development[5]. Good learning outcomes will be gained if suitable learning techniques, essentially approaches that are influenced by the situations and circumstances of daily life, are applied. As a result, educators' professionalism is necessary to keep up with the times, science and technology, as well as community demands such as the need for quality human resources and the capacity to compete in regional, national, and worldwide forums.

Educators must be able to select and create instructional materials based on developmental concepts in order for students to reach the desired skills. Educators must be able to generate and develop instructional materials based on the requirements of their pupils so that learning objectives are met. Educators must be able to select appropriate instructional materials so that students grasp the content provided and to engage students' brains, which will have an influence on student learning outcomes, particularly in historical topics. [6]

Researchers will provide teaching resources for African History in the form of Ecopedagogy-based E-Modules in African History lectures at the Department of History Education, FIS UNIMED, as part of this study. This is due to a scarcity of African history literature. The market literature is merely Grand Narrative literature, which is low in value (valueless) and tends to feature tales about cause and effect alone. The substance of the African History material is rich in possible Ecopedagogy ideals for pupils to assimilate, especially in light of today's constant environmental and health concerns.

African History Lecture material is full of Ecopedagogy values. Ecopedagogy is the value of love for the environment which is reflected in actions. [7]. The internalization of Ecopedagogy values can prevent natural disasters caused by human activities. The forms of ecopedagogy include maintaining environmental cleanliness, preserving the environment, and avoiding actions that can damage/pollute the environment. All of these values that have been faded in history learning with a grand narrative approach and will be internalized through an eco-pedagogy-based E-module of African history that will be developed.

2.　　　Methodology

The research and development technique was applied in this study. The development research technique is a way for producing specific items and testing their performance (Sugiyono, 2010:407). Research and Development is a process or series of procedures that can be used to create a new product or improve an existing one [8].

This application development method employs Borg and Gall's [9] research and development (R&D) paradigm. The stages of the R&D development model are as follows: a) the needs analysis stage, which includes student analysis, material analysis, and goal specification; b) the design phase of teaching materials products, which includes teaching material selection and initial design; and c) the production/implementation stage of initial product development, which includes teaching material manufacturing and the preparation of assessment instruments (validation sheets, questionnaires/questions) (History Education Lecturer); d) the revision stage, which includes revisions or improvements to the media based on validator suggestions; f) the product testing phase, which includes testing the material on students, filling out

questionnaires by students, and implementing learning outcomes tests; g) the final revision and dissemination stage, which includes an analysis of the media's success and final improvement or revision of the media, as well as media dissemination. The efficacy test is the final phase in this study [10].

3. Result and Discussion

3.1 Assesment/Analysis

During the development stage, the lecturer will perform preliminary research and analysis to determine the existing condition in the field, in this case, the students of the Unimed History Education Department. Questionnaires, field observations, and literature studies are used as data collectors to determine which demands are important for the construction of the African History E-Module.

The preliminary findings indicate that pupils continue to struggle with understanding Africa's past. They just strive to remember the content without comprehending the values embedded within it. Questionnaires were also used to examine challenges and the necessity for students to use media in order to facilitate learning of African history with them.

Based on the findings of these observations and surveys, it is possible to conclude that African history topics require the delivery of material in both appearance and substance through appealing medium. These various products can stimulate students' higher-level cognitive abilities and boost concentrate in earning grades in African History coursework. Meanwhile, library research activities on the construction of the African History E-Module Application and the most recent African history information were carried out in the Medan State University library, as well as collections from the history education study program.

3.2 Design

According to Borg and Gall, the design phase tries to discover and record the optimal ways for achieving the goal of generating media [11]. One of the papers created during this step is a storyboard document, which follows the sequence of teaching activities based on the needs of the lesson and the learning media objectives as determined during the needs analysis phase. This phase, like the first, requires an assessment before moving on to the development and implementation phases.

The graphic design of the African history E-module application will be updated to match the storyboard in terms of look and content. The developer decides on the infographic design that will be displayed in the application, the design of the display of appealing instructional materials, the selection and arrangement of pictures, the size of the text, and the clarity of the content at this stage. The flow of the application design is shown below.

3.3 Development and Implementation.

Phases of development and execution According to Hannafin and Peck, the activities carried out during this phase included the creation of flowcharts, testing, as well as formative and summative evaluations [12]. The storyboard document will be used to create flow diagrams that will aid in the creation of visual E-Modules. This step includes assessment and testing to determine the smoothness of the generated media, such as link continuity. To obtain the required

E-Module media quality, the evaluation and testing findings will be employed in the customisation process[13].

3.4 Media Expert Validation
The media expert's evaluation focuses on each component featured in the AKM Infographic. Dr. Samsidar Tanjung, M.Pd, a lecturer at the Department of History Education, Faculty of Social Sciences, State University of Medan, served as the study's validator (expert). A media expert feasibility test questionnaire was used for validation in early June 2021. There are various assessment components in the questionnaire, including layout design, text or typography, graphics, supplementary literature, and users. a. Design Phase (Product) [14].

The researcher's African History-Based E-module received a 4.66 for the layout design component, a 4 for the text or typography component, a 4 for the picture component, a 4.5 for the supporting literature component, and a 4.5 for the component user. The overall average score for all components was 4.47, placing it in the "Very Good" category. Thus, without needing to alter it, the Development of an Ecopedagogy-Based African History E-module is worth trying [15].

3.5 Material Expert Validation
The material expert validation exam is used to evaluate the content in the Ecopedagogy-Based African History E-module Development. Dr. Lukitaningsih, M.Hum., Head of the Study Program at the Department of History Education, Faculty of Social Sciences, Medan State University, served as the material expert and validator in this study. A material expert feasibility test questionnaire was used for validation in early June 2022.

The expert validation of the content component material yielded an average score of 4.7, while the language component yielded a score of 4.66. The combined average score for both components was 4.69, placing it in the "Very Good" category. Based on these findings, the Development of an Ecopedagogy-Based African History E-Module is worth trying [16].

4.   Conlusion

The created Ecopedagogy-based African History E-Module application can be an effective learning medium for pupils and aids in the study of African history. The Hybrid Learning learning paradigm will undoubtedly be more successful when used in conjunction with the E-module Application. Furthermore, the usage of the E-module application may encourage students to establish a learning and autonomous culture, as well as boost their Literacy Hots ability.

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