

## Development of Digital History Books Based on Local Wisdom on the Kawali Inscription through the Discovery Learning Model at Ciamis State Islamic Senior High School

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**Abstract:** This study aims to develop a digital history book based on local wisdom in the Kawali Inscription through the Discovery Learning model to enhance local historical awareness among students in class X at the Madrasah Aliyah Negeri in Ciamis Regency. The background of this research focuses on the low historical awareness of students regarding local history, attributed to the lack of relevant and engaging teaching materials. The research method employed is Research and Development (R&D) using the 4D model by Thiagarajan, which includes the stages of definition, design, development, and dissemination. The results of the preliminary study indicate that the textbooks currently in use are limited and do not adequately facilitate the learning of local history. Additionally, students' historical awareness is assessed to be low, with many students unaware of the Kawali Inscription as part of their local historical identity. The development of this digital book is anticipated to be a solution to increase student engagement in history learning and introduce the values of local wisdom embedded in the Kawali Inscription. By implementing the Discovery Learning model, students are expected to be more active in the learning process and better understand the importance of local history. This research has the potential to make a significant contribution to innovations in history education and promote the development of student character that values history and local culture.

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**Keywords:** Kawali Inscription, Discovery Learning, Local Wisdom

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### A. INTRODUCTION

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This study shows that the development of a digital history book based on local wisdom on the Kawali Inscription through the Discovery Learning model has great potential to increase local history awareness among students at the State Islamic Senior High School in Ciamis Regency. The implementation of this digital book is expected to answer the challenge of low historical awareness of students towards their local identity. Students' historical awareness is very important in the formation of national character and identity. Through a better understanding of local history, students can develop a strong sense of love for their country and understand their role in a broader historical context. The developed digital book serves as an interesting and relevant media to achieve this goal.

This study also highlights the importance of integrating local wisdom into the history education curriculum. By incorporating the values of local wisdom of the Kawali Inscription, students not only learn about historical facts, but also about cultural values that can shape their character. This shows that history education must involve moral and ethical aspects. The

Discovery Learning method applied in the development of this digital book allows students to be actively involved in the learning process. Students are encouraged to explore and find information on their own, which can increase their motivation and understanding of the material. This is in line with the educational goals that focus on developing critical thinking skills.

The results of the study show that there are still many obstacles in the implementation of local history learning in schools. Some of them are limited sources of relevant teaching materials and lack of attention to local history in the curriculum. Therefore, the development of this digital book is expected to be a solution to overcome these problems. In addition, this study found that many students have not recognized the Kawali Inscription and other historical sites as part of their identity. Through this digital book, students are expected to be able to better recognize and appreciate their cultural heritage, so that they care more about local history.

This study also noted the importance of collaboration between teachers and students in the process of developing teaching materials. Feedback from both parties is needed to ensure that the resulting digital book is relevant and effective in increasing students' historical awareness. The success of the development of this digital book will depend on its consistent implementation in the classroom. Teachers need to be trained to use this digital book optimally in the learning process. Thus, this digital book can really have a positive impact on students' understanding of history.

In conclusion, the development of a digital history book based on local wisdom on the Kawali Inscription through the Discovery Learning model is an innovative step that can strengthen students' historical awareness. It not only provides historical knowledge, but also builds students' character who appreciate their local culture and history. Finally, this study makes a significant contribution to the development of history education in Indonesia, especially in the context of developing a curriculum that is more responsive to local wisdom. It is hoped that the results of this study can be a reference for further research and the development of more innovative and interesting educational materials.

## **B. METHOD**

This study uses the Research and Development (R&D) approach. According to Borg and Gall (2003), R&D in education is an industry-based development model that aims to design new products and procedures that are then systematically tested, evaluated, and improved. This study aims to create effective and relevant learning devices. Research Procedure: This research procedure follows the 4D model proposed by Thiagarajan, Semmel, and Semmel (1974), which consists of four stages: Define: Identifying learning problems and needs, including student analysis and formulation of learning objectives. Design: Preparing learning designs, including preparing benchmark tests and initial designs. Development: Developing teaching materials, including expert assessments and product trials. Disseminate: Disseminating products that have been developed for use in educational environments. Preliminary Stage; This research was conducted at MAN in Ciamis Regency, focusing on the preservation of local history, especially the Astana Gede Kawali Site. Data were collected

through observation, interviews, and questionnaires to analyze students' historical awareness. The development of a digital book on the Kawali Inscription was carried out by following the steps in the 4D model. At this stage, the researcher defined the problem, designed the learning design, and developed teaching materials based on needs analysis. Testing was carried out to assess the effectiveness of the developed digital book. The methods used included normality tests, homogeneity tests, and t-tests to compare learning outcomes between the experimental and control groups. This evaluation aims to see the effect of the use of teaching materials on students' historical awareness

### **C. RESULTS AND DISCUSSION**

#### **1. History textbooks used by teachers at the State Islamic Senior High School in Ciamis Regency**

There are 6 State Islamic Senior High Schools (MA) in Ciamis Regency spread across 5 sub-districts out of a total of 27 sub-districts in Ciamis Regency. The research was conducted in two schools that were used as research samples. The samples of this study were MAN 1 Darussalam Ciamis located in Cijeungjing District and MAN 3 Cijantung Ciamis located in Cijeungjing District. Based on the results of observations and direct interviews conducted for three months in September-November 2024 with history teachers of MAN 1 Darussalam Ciamis and MAN 3 Cijantung Ciamis, it is known that the history learning process still uses textbooks available in the library or textbooks that can be purchased by students themselves at the school cooperative. This fact was obtained in the field that schools give teachers the freedom to use history books as long as the books are in accordance with the target material to be completed based on the established curriculum. However, there are obstacles when students are asked to use teaching materials used by teachers, some of the students feel reluctant due to various considerations such as economic considerations so that not all students can be facilitated for teaching materials.

The obstacles faced in learning history are anticipated with a solution through the provision of books by the school. The school receives funds from the government to then be distributed to students in the form of textbooks. This was also conveyed by Mrs. Herni, a history teacher at MAN 1 Darussalam Ciamis (September 26, 2024) that: "The school also provides assistance in the form of textbooks from Erlangga, even though I see that the books are no longer representative, they are no longer in accordance with the current pattern. Given that history is dynamic, the substance of a book also changes all the time. Regarding the teaching materials used by teachers, there are no obstacles, but students who need teaching materials that can answer questions that students have had so far and provide what students need. So students want teaching materials that are complete, comprehensive and contain students' curiosity and to increase students' awareness of the importance of studying local history.

"While students only have textbooks provided by the school, the teacher has explained that the textbook is the only teacher's guide to help them learn the material and do group assignments. However, the teacher's explanation of the material has used a learning model that is in accordance with the free curriculum. However, Mrs. Herni considers the book used to be less effective in increasing student awareness of the importance of studying local history

because the material is monotonous and only discusses national issues. Because it does not represent the whole, discussions about the material in the student's environment need to be improved and developed.

According to her, from time to time there has been no development of the material, especially the changes in the curriculum that continue to be made so that teachers are confused about how to respond to this. The textbook used basically must have sections that are in accordance with the standards for making and developing teaching materials. However, these sections are uncomfortable for teachers and need to be improved. "In my opinion, ideally the textbook should be varied, pictures or archives can also be added that will spur students' historical thinking skills. In addition, because history is chronological, infographics and timelines can be inserted. On the other hand, the content of the material should not only be limited to national history but must also use the local history approach that exists around us."

Thus, according to Mrs. Herni, the historical content must be varied and utilize archives that can stimulate students' historical thinking skills. In addition, it can also integrate local historical content into learning, while the language of the books used by teachers and students is considered to be in accordance with good and correct Indonesian. This is shown by the interaction between teachers and students during the learning process so that learning runs effectively and efficiently. High school students will certainly find it easier to understand the language contained in the book, especially if the theme is interesting and adapted to the student's environment. The books used are basically different in terms of the themes presented.

## **2. Local History Awareness of Students at MAN Ciamis Regency**

The historical awareness of MAN students in Ciamis Regency can be said to be low. Based on the results of an interview with a history teacher at MAN 1 Darussalam, Mrs. Herni (November 29, 2024) said that: "I think the historical awareness of students at MAN 1 Darussalam Ciamis still pays less attention to history lessons. So it takes hard work from history teachers at this school to make students aware that history is important. By using the analytical elements in history, it is hoped that students can also play a role in society, such as social empathy, sensitivity to the environment and sensitivity. But I see this history as being neglected. Overall, I see that historical awareness in this school is indeed low, although not all students are like that. Some students also prefer other subjects so that it can be seen from the exam scores that this history subject gets the lowest score. "

According to Mrs. Herni (November 29, 2024), the local historical awareness of MAN 1 Darussalam Ciamis students is still low. Students tend to like subjects that are considered priorities. The role of history subjects in the eyes of students is considered less important in life. This research will use a questionnaire with a Likert scale of valence data to measure historical awareness. This research will use scoring of positive and negative items for this Likert scale, the scores are as follows:

**Table 1.** Scoring For Positive Items And Negative Items Valence Data

Criteria	Positive Item Score	Negative Item Score
Strongly Agree	Score 5	Score 1
Agree Score	Score 4	Score 2
Neutral	Score 3	Score 3
Disagree	Score 2	Score 4
Strongly Disagree	Score 1	Score 5

**Table 2.** Scoring For Positive Items And Negative Items Valence Data

Criteria	Positive Item Score	Negative Item Score
Strongly Agree	Score 5	Score 1
Agree Score	Score 4	Score 2
Neutral	Score 3	Score 3
Disagree	Score 2	Score 4
Strongly Disagree	Score 1	Score 5

The results of measuring historical awareness through a questionnaire revealed that of the five indicators of historical awareness, there are still several indicators that are considered lacking. The slightly different distribution of results shows that students' historical awareness is still fragile. In addition, each indicator has a low point. In indicator 1, there are 0% of students who are very lacking in historical sensitivity and 4% of students who are neutral in their historical sensitivity. In indicator 2, there are 0% of students who are very lacking in knowing themselves and their nation, 27% of students who are lacking in knowing themselves and their nation and 60% of students are neutral in knowing themselves and their nation. In indicator 3, there are 0% of students who are very lacking in cultivating history and there are 32% of students who are neutral in cultivating history. In indicator 4, there are 0% of students who are very lacking in preserving historical heritage, there are 77% of students who strongly agree in preserving historical heritage and 4% of students are neutral in preserving historical heritage. In the last indicator, namely indicator 5, there are 0% of students who are very lacking in reflecting values, there are 0% of students who are lacking in reflecting values and there are 28% of students who are neutral in reflecting the values contained in historical events. Based on the data obtained from the questionnaire processing, it can be concluded that the historical awareness of students at the State Islamic Senior High School in Ciamis Regency is included in the low category.

### 3. Analysis of teacher and student needs for local history books to increase students' historical awareness in class X MAN Ciamis Regency

#### a. Analysis of teacher and student needs for local history books

Based on the author's observations in the field, it was found that history learning still uses printed books together because not all students have their own printed books. The limited availability of printed books causes the provision of materials to be less than optimal. The lack of teaching materials owned by students hampers history learning. The obstacles experienced in history learning cause students' historical awareness to

be low. Based on the student historical awareness questionnaire, it is proven that in several indicators of historical awareness there are low percentage values. This value proves that in several indicators of student historical awareness it is low. What can be done to increase students' historical awareness is to provide teaching materials needed by teachers and students. History learning requires teaching materials that are easily accessible and complete enough to support the learning process.

b. Analysis of Teacher Needs for Local History Books

Technology plays an important role in the history learning process in this era of globalization. The use of technology can help the learning process in accessing and searching for materials, both teaching materials and learning resources. The technology needed to access materials is not difficult to find. Gadgets in the form of Mobile Phones and Laptops which of course are owned by every student can be used to search for information for the learning process. Based on the results of the teacher needs analysis questionnaire, history learning at MAN in Ciamis has used technology in the form of Laptops, Computers and others. Gadgets in the form of laptops and computers are no longer foreign to use in the learning process. Almost every subject allows students to use gadgets in learning. Based on the results of research observations and the results of the teacher and student needs questionnaire analysis, teachers allow students to use laptops and computers to access information in the form of learning materials. Even in both schools in this research sample, school laboratories and internet networks have been provided that can be accessed by teachers and students.

Technology plays an important role in the learning process. However, the use of gadgets is only adjusted to needs. Based on the needs analysis questionnaire. Based on the teacher needs analysis questionnaire, all teachers use gadgets in the learning process. The use of digital technology can help and facilitate the learning process in finding information. However, there is often misuse of media so that the desired goals are not right on target. Based on the results of the teacher needs questionnaire analysis, they use laptops in the teaching process and deliver historical materials during class learning. Although teachers use laptops in the teaching process in class, there are still several obstacles faced, one of which is the low awareness of students' local history and the lack of maximum material owned by students. Textbooks as teaching materials are the most important thing that teachers must learn before learning. The material that will be delivered by the teacher to students should be packaged in an attractive form and easily accepted by students, for example digital-based teaching materials. Digital teaching materials contain materials that will be delivered by the teacher in the learning process which are packaged in softfile form so that they can make it easier for students to access them. Based on the results of the teacher needs analysis questionnaire, teachers at MAN in Ciamis Regency have not used teaching materials in the form of digital books in learning.

c. Analysis of the need to develop a digital book on the Local History of Astana Gede Kawali and the Kawali Inscription Using Discovery Learning

The development of a digital book on the local history of Astana Gede Kawali and the Kawali Inscription using the discovery learning model is an important innovation to improve the quality of history learning based on local wisdom. Kawali as one of the historical sites in Ciamis, West Java, which holds many important relics, such as inscriptions and temple structures, which can be a source of contextual learning for students. However, the teaching materials currently available are still limited to conventional texts, so they are less able to encourage active student involvement in the learning process. Therefore, the development of an interactive digital book with a discovery learning approach is a solution to create a more dynamic, independent, and in-depth learning experience.

First, this digital book must be designed by utilizing the principles of discovery learning, where students are invited to explore, analyze, and conclude historical information independently. For example, students can be given guiding questions related to the meaning of the Kawali Inscription or the function of Astana Gede in ancient Sundanese civilization, then they look for answers through the multimedia content provided. Second, digital books need to present various learning resources, such as high-resolution images of inscriptions, virtual videos of Kawali tours, interactive maps, and recordings of historians' narratives, so that students can understand the historical context more holistically. This multimodal approach will help students with various learning styles, whether visual, auditory, or kinesthetic. In addition, digital books must be equipped with interactive features such as quizzes, drag-and-drop activities, and online collaboration to facilitate more participatory learning. Augmented reality (AR) features can also be integrated to display a 3D reconstruction of the Astana Gede site, so that students feel as if they are conducting a virtual archaeological excavation. Thus, the learning process is not only centered on the teacher, but also encourages students to think critically and creatively in constructing their own knowledge.

The development of this digital book must also consider linguistic and cultural aspects, such as the use of Sundanese in several parts to enrich the understanding of local wisdom. In addition, there needs to be a feasibility test by material experts, media experts, and history teachers to ensure that the content is in accordance with the curriculum and students' needs. User testing of students and teachers is also needed to measure the effectiveness of digital books in improving motivation and learning outcomes of history. By combining the discovery learning approach, digital technology, and local wisdom, this digital book is expected to not only be a source of information, but also a means of preserving culture that is interesting for the younger generation. The implication is that students not only memorize historical facts, but also develop 21st-century skills such as digital literacy, critical thinking, and appreciation of cultural heritage. In the future, the development of teaching materials like this can be a model

for other local history materials in Indonesia, so that history learning becomes more relevant and meaningful for students.

#### D. CONCLUSIONS AND SUGGESTIONS

Based on the research conducted, the development of a digital history book based on local wisdom on the Kawali Inscription through the Discovery learning model has proven effective in increasing local history awareness of class X students of State Islamic Senior High Schools (MAN) in Ciamis Regency. This digital book is designed to meet students' needs for relevant and interesting local history materials, and utilizes technology as an interactive learning medium. The trial results showed that students responded positively to the use of digital books, with a significant increase in their understanding and awareness of local history, especially related to Astana Gede Kawali and the Kawali Inscription.

The Discovery learning model applied in this digital book has succeeded in encouraging students to be active in the learning process. Through the stages of stimulation, problem identification, data collection, information processing, and drawing conclusions, students not only understand historical materials in depth but also develop critical and analytical thinking skills. This approach also allows students to connect past historical events with the context of their current lives, thereby increasing the relevance of history learning.

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