Development of E-Book Teaching Materials about the Four Days Battle in Surakarta August 7-10, 1949 as a Source of Local History Learning for History Education Students

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Abstract

An e-Book is a book that is displayed in digital form that can be used as a support for the learning process. This development aims to develop a digital book (e-Book) about the Four-Days Battle in Surakarta August 7-10, 1949 as a source of local history learning for students of the history education study program. This study uses the Research and Development (R&D) method in its research procedures and uses the ADDIE development procedure (Analysis, Design, Development, Implementation, Evaluation) as the stage of developing teaching materials. This product involves two media validators, two material validators, lecturers, and students of history education at the Veteran Bangun Nusantara University. The results of this development show that the e-Book based on the Four-Days Battle in Surakarta is proven to be valid and feasible based on the assessment of media and material factors from experts. Meanwhile, the results of assessments from small, large, and broad groups also show the effectiveness of the product based on the analysis. needs.

I. Introduction

Education is part of a larger effort to expand the knowledge, abilities, and special skills of individuals, including students, so that their talents and competencies can be fully developed. According to Astuti et al (2019) Education is an obligation of every human being that must be pursued to hold responsibilities and try to produce progress in knowledge and experience for the lives of every individual. Then must understand the background,objectives, and content of character education policies (Pradana, 2020). This refers to the application of the learning process and the ability of lecturers in building lecture capacity and student competencies optimally. Their potential can be realized if they can learn independently and focus on exploring knowledge from students. If it can provide opportunities and stimulation for students to play an active role in the learning process, it is called active and independent learning.

The results of previous education and learning received from parents and educators ultimately result in the current conditions and atmosphere in society, therefore it can be said that educating children is the same as educating the nation's life. Thus, more attention should be paid to how the educational process is carried out for today's students, the results of which will determine the direction in which the country goes (Dewantara, 1977: 3).

The sense of nationalism that is ingrained in this nation is formed as a result of improving the quality of education in the field of learning about the history of its own nation, which will later grow a strong national character and trigger a strong sense of

nationalism towards the country. According to Sartono Kartodirdjo (1992: x), the process of forming national character can be carried out through the demands of historical reconstruction as national history that can realize the crystallization of the identity of the Indonesian nation. Redevelopment can be carried out completely and perfectly at every level of society through educational institutions, where the history learning process is applied regularly and organized in every school. Students should be able to grasp how the nation struggled to construct this country through history classes. History learning, according to Gottschalk (2008: 3), is a means of providing community-wide nationalist education. This is due to the fact that stories about their birthplace can instill a sense of pride and patriotism in the community. Students should be able to grasp how the nation struggled to construct this country through history classes. History learning, according to Gottschalk, is a means of providing community-wide nationalist education. This is due to the fact that stories about their birthplace can instill a sense of pride and patriotism in the community which gradually developed and turned into national history.

II. Review of Literatures

2.1 Low Awareness of the Value of Local History

A weakened national identity is an impact that usually arises due to a person's low awareness of the nation's history. The emergence of many social problems that exist in society is caused by the weakening of the nation's character, where indicates that identity is often ignored, which ultimately leads to the emergence of a multidimensional crisis that causes the nation's moral values to decline.

A sense of belonging will arise in the community if they understand the historical values or the values of struggle that exist in the surrounding environment. They will also try hard to keep their environment intact and peaceful. Some vandalism cases that have occurred recently are evidence that the level of awareness of local historical values is still minimal or lacking.

Vandalism is a negative phenomenon that is certainly a nuisance in social life, where this should be considered (Analisa, 2019: 97). Vandalism that is often encountered is vandalism that occurs in public spaces or private property that is transparent to public perception, where no individual is directly responsible for it, or its protection has not been carried out optimally (Scott, et al. 2007: 2). In addition, vandalism is often found on archaeological and recreational sites, namely in the form of graffiti or in other forms. Therefore, a joint management solution is needed so that the existence of natural and cultural resources can be protected (Christensen et al. 1992: 290).

In the Solopos.com report submitted by Irawan Sapto Adhi on April 25, 2016, it was stated that the Surakarta Sunanate Palace (Keraton Kasunanan Surakarta) could no longer avoid acts of vandalism, in which the walls in the Palace complex were targeted. Deputy of Sasana Wilapa Surakarta Sunanate Palace, K.P. Winarno Kusumo explained that currently there are many streaks of vandalism that are visible in the number of the Palace complex. He was disappointed with the vandalism action, which of course the perpetrators did not feel guilty for the actions that caused the soiling of buildings in the cultural heritage area.

In a report by Ichsan Rosyid via Timlo.net on December 16, 2019, it was stated that the history lover community was protesting the action of an ancient building in the east of the Prosecutor's Office, Kepatihan carried out by the Solo City Government. Heri Priyatmoko as a historian and activist for Solo Societeit said that the government did not have an understanding and awareness of the importance of history.

Even the city government is indifferent. This is evidenced by the demolition of the historic building. In the plan of the ancient Kepatihan complex shown by Heri, there is a building termed Sasranegaran, where this designation is taken from the name of the governor who first occupied it, but currently the building is only a stretch of land.

The news that was informed by Suara Baru on January 17, 2020, also mentioned that there was a disgraceful act by a foreign figure who crossed out the Pasar Gede Clock Monument, where this monument certainly contains historical values. The streaks began to appear after the lantern festival was held on January 14, 2020. The residents of Solo City strongly criticized the vandalism act because this action was wrong and should be avoided.

The three cases that have been applied above maintain that a sense or situation is orderly, safe, and beautiful in society. The lack of public awareness of their understanding of the history of the nation in their country, especially local history, can result in the emergence of some social problems. If each individual contemplates and thinks deeply about how hard the heroes and the people in the past fought for and defended Indonesia's independence, then these individuals can't carry out acts of destruction of historical buildings in their living areas.

There is a close relationship between historical awareness and historical understanding. Hariyono (1995: 36-37) explains that the relationship between historical insight and historical awareness cannot be separated. Awareness refers to social and affective aspects, while historical insight focuses more on cognitive aspects. The difference between the two is identifiable, but the two are interrelated and cannot be separated. Aman (2011: 31) also expresses the same thing, namely the function of history learning is sociocultural, where historical awareness can be grown or raised.

Each in his soul or mind intact certainly requires historical awareness, which awareness is part of the goal of historical education. Thus, dehumanization will not appear in those who have historical consciousness. In short, by understanding history, a person will have an understanding of what things they should do and what things need to be abandoned or avoided.

2.2 The Meaning of the Four-Days Battle in Surakarta

The Battle of Surakarta or also called the Four-Days Battle in Surakarta took place on August 7-10, 1949 in a guerrilla manner by combatants and students. The students who took part in the battle came to be known as student soldiers (in Indonesian it is called Tentara Pelajar). They managed to burn and occupy Dutch headquarters in Solo and its surroundings (Wardhana, 2019: 35).

The Four-Days Battle in Surakarta gave a message and meaning that youths from different ethnic groups and religions were united to reclaim Indonesia's independence and sovereignty from the Dutch. In addition, the Four-Days Battle in Surakarta proved that the Indonesian National Armed Forces (TNI) still had great strength and were able to carry out an offensive involving more than 2,000 personnel to fight the Dutch troops. This refutes the opinion of Lieutenant General (Artillery) Dirk Cornelis Buurman van Vreeden, as a high-ranking officer as well as commander of the Koninklijke Nederlands Indisch Leger (KNIL/Dutch Indies Army) during the Roem Royen Negotiations he argued that the Indonesian National Armed Forces (TNI) had been destroyed and dispersed, and not just a wild armed gang so that he was entitled to continue military operations in Java (Boediono et al. 1999: 53).

Based on the 1949 statistics reported by the Headquarters of the General Staff of the Dutch East Indies (Hoofdkwartier van de Generale Staf in Nederlands-Indie abbreviated HKGS-NI), the TNI/Wehrkreise I resistance with the Surakarta Residency and parts of

Madiun against the Dutch was the pinnacle of success for the Indonesian National Armed Forces. (TNI) militarily:

1) The attacks by the Indonesian National Armed Forces on military posts and the highest Dutch convoy vehicles for Java and Sumatra were 707 attacks in the period December 19, 1948 to August 15, 1949.

2) Indonesian National Armed Forces attack on Solo city 15 times was the highest city attack for Java and Sumatra in the period December 19, 1948 to August 15, 1949. Brigade V/II attacked Solo twice and Sub-Wehrkreise 106/Arjuna as many as 13 times. In the Four-Days Battle in Surakarta which was initiated by Sub-Wehrkreise 106/Arjuna and subsequently assisted by the escalation of the Indonesian National Armed Forces V/II Brigade so that its personnel reached 2,000 personnel, this was the only attack that took place day and night for four full days. (Yoedoprawiro, et al. 2000: 210-211).

In addition, the Four-Days Battle in Surakarta influenced political movements in Indonesia. The Indonesian Military Forces indirectly assume that the Surakarta area is no longer strategic to be recaptured, because with the ceasefire order directly from the President of the Republic of Indonesia, sooner or later the Surakarta area will be handed over. However, the Four-Days Battle in Surakarta was still carried out as it should be because this would facilitate the handover of the City of Surakarta from the Kingdom of the Netherlands to the Republic of Indonesia, so that with this attack the City of Surakarta was handed over directly to the Lieutenant Colonel. Slamet Riyadi as the representative of the Republic of Indonesia.

2.3 e-Books as Learning Resources

Learning resources are interpreted as all resources that can be used to facilitate students in learning activities (Sudjana, 2013: 77). So that learning resources contain a very broad understanding, because everything in the environment around us can function as a learning resource for the achievement of a good teaching and learning process and train students' critical power to understand historical facts correctly (Aman, 2011: 58), these goals can be realized through innovation so that effectiveness and efficiency in the teaching and learning process of history can be achieved (Nichol, 1984: 62).

Putra (2014: 56) explained that e-Book is a technology that applies computers to display multimedia information whose form is considered dynamic and concise. In line with the statement presented by Armstrong, Edwards, Louise., & Lonsdale (Cumaoglu, Sacici, & Torun, 2013: 121-122), they state that e-Books are every type of electronic text regardless of size or composition (digital objects), but excluding journal publications, available electronically (or optically) for any device included in a screen or monitor. Embong, et al. (2012: 1802) explain that e-Books offer students, educators, and schools regard to additional media that can be used to support the learning process.

From the description above, the conclusion that can be conveyed is that an e-Book is a book that is displayed in digital form and can be opened via electronic devices (computers, smartphones, or tablets). e-Books can also combine sound, graphics, images, animations, or films, which in the end the information displayed is richer when compared to conventional books.

III. Research Methods

The research method in this study uses Research and Development (R&D). R&D is a process in research and to validate products (Borg and Gall, 1983:772). The main focus of this development method is to develop and see the effectiveness of the product. For the

development of the teaching materials themselves, the ADDIE development model was used. The ADDIE model is structured, not difficult to apply, and has clarity in terms of its framework, which ultimately leads to effectiveness and efficiency in the products it produces (Angel Learning, 2008: 5). The ADDIE model is also part of the learning system design model that displays several basic stages of a simple and easy learning system. There are five phases of development in the ADDIE model, namely Analysis, Design, Development, Implementation, and Evaluation (Molenda, 2013: 107).

This research was conducted at the History Education Study Program at the Veteran Bangun Nusantara University, even semester students of the History Education study program who were taking the Local History course. The research involved two validators of media and materials experts, students, and lecturers each. The results of this study are qualitative and quantitative data. Qualitative data were obtained through the development stage of teaching materials in needs analysis, and at the stage of designing teaching materials, in which there were interviews with lecturers, and distributing needs questionnaires to students. Meanwhile, quantitative data were obtained through the stages of developing teaching materials, implementing teaching materials, and evaluating teaching materials, including validation by material experts, media experts, small tests, large tests, and broad tests.

This study uses descriptive statistical data analysis techniques. This analysis is used to process the data obtained from the instrument in the form of the average score of the questionnaire, using the following formula:

$$\bar{X} = \frac{\Sigma x}{N}$$

Note
X : Mean (Average Score)
Σx : Total Items
N : Number of Statements

Table 1. Guidelines for Assessment Criteria

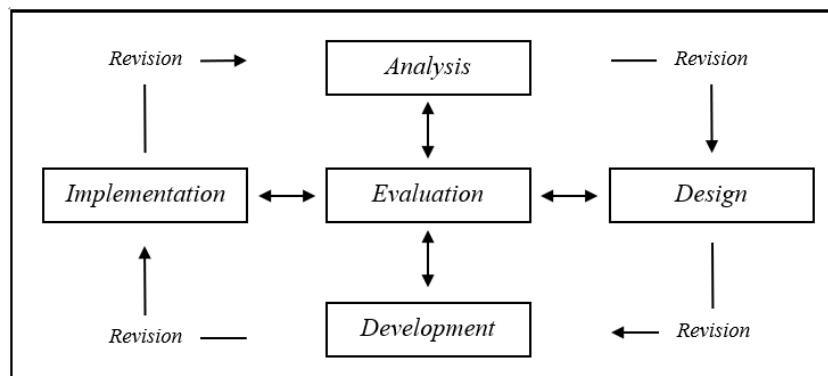| Interval	Score	Criteria
X ≥ 4,21	5	Very Good
3,40 < X ≤ 4,21	4	Good
2,60 < X ≤ 3,40	3	Enough
1,79 < X ≤ 2,60	2	Less
X ≤ 1,79	1	Not Good

(Source: Sudijono, 2005: 132)

Figure 1. *ADDIE Development Procedure (Source: Molenda, 2014: 107)*

IV. Discussion

4.1 Results

a. Analysis

The teaching materials that have been used by lecturers are still limited, although the types are varied, but not maximal. Using PowerPoint slides is a natural thing to do, besides that, lecturers also hold field lectures after the material has been explained, even once a semester in one course. The learning system in this semester has changed due to the COVID-19 Pandemic and direct instructions from the Ministry to carry out Online Learning at the university level. So that automatically teaching materials and teaching lecturer methods to follow what the Ministry has instructed, using the Spada Website (In-Network Learning System) owned by each campus, WhatsApp Group, Zoom Meeting, Google Meets, and others. Students still find it difficult because this is relatively new, especially when carrying out group discussions, it is very difficult to share material and discuss only by chatting or video conference in the Zoom Meeting or WhatsApp application.

Apart from the factor of teaching materials, distance learning is less effective because this is the first experience for students. The previous learning system did vary in methods and media, but it could still be redeveloped to further deepen the historical materials. To improve the understanding of student history, the teaching materials used must be up-to-date so that they are by the times and the current education system.

Based on the analysis of student needs above, lecturers are expected to make maximum use of this e-Book teaching material in the history learning process. The use of digital teaching materials based on local historical sources is very mandatory to be presented in online and offline lectures. Through e-Books, students can understand and imagine historical relics presented by educators. Although digital teaching materials from year-to-year experience changes and developments, almost all of these digital teaching materials are reliable and effective for use today.

Then the researchers distributed a questionnaire on student needs to the students of the Veteran Bangun Nusantara University, the History Education Study Program, totaling 34 students. Based on the results of the history student questionnaire, the information obtained is as follows:

Table 2. Explanation of Indicators and Statements of Analysis of Teaching Material Needs

Aspects of Student Needs	Achievement Indicator	Average	Category
Learning Methods	Student needs for various learning methods	3.3	Very Necessary
Teaching Materials	Student needs for e-Book teaching materials	3.3	Very Necessary
Teaching Material Format	They need to learn through technology	3.3	Very Necessary

(Source: Processed from Author's Questionnaire Data, 2021)

Table 3. Range of Criteria for the Average Results of the Needs Analysis Questionnaire (Scale 4)

Score	Value
0,00 - 1	Very Unnecessary

1,01 - 2	Unnecessary
2,01 - 3	Need
3,01 - 4	Very Necessary

Based on the table above, shows that the average score is 3.3 which, when adjusted to the scale range table, is included in the " Very Necessary " category. This proves that the students of the History Education Study Program at the Veteran Bangun Nusantara University need the development of digital history teaching materials. So, it can also be concluded that students are ready to accept digital-based learning and are considered by researchers to develop products for these students.

b. Design (Product Design Stage)

At this stage, the design of digital book teaching materials (e-Books) will be developed. This design serves as a guide in developing digital e-Book storyboards. In the following, a descriptive design for the development of the e-Book of the Four-Days Battle in Surakarta will be described.
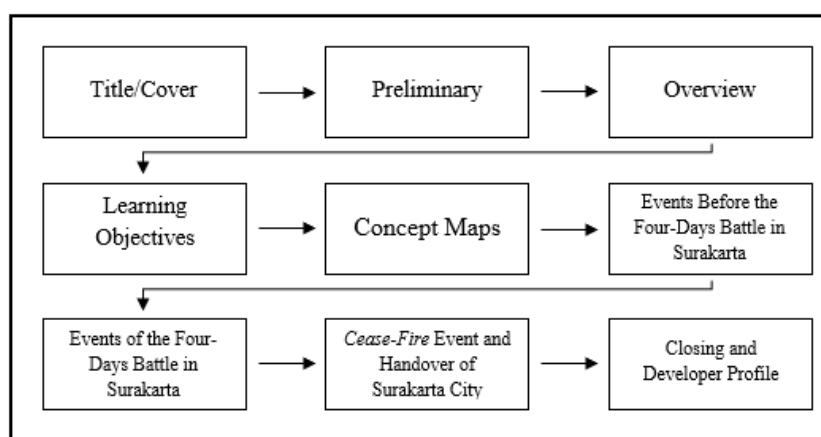

Figure 2. Concept of e-Book Content

c. Development (Development Stage)

After the preparation stage is deemed sufficient and the things needed have been met, then proceed with the creation of an e-Book. In making e-Books, several applications are used, in the preparation of the layout and user interface the Adobe CorelDraw X8 application is used, then to edit and improve visual images, the Adobe Photoshop CC 2021 application and Adobe Photoshop Lightroom Classic 2021 are used, as well as for the operating system and user interface. used Adobe InDesign CC 2021.

After the e-Book has been created, it is then inserted into a WordPress-based website platform. There are several reasons researchers chose the WordPress platform for this product, namely: 1) It can be accessed for free and freely, especially during the Distance Learning period, students need a platform for teaching materials that are easy, cheap and practical to access, 2) The WordPress platform is a website which provides plug-ins or features that already support running e-Books and are available for free, 3) In the operation and development of the WordPress platform, it is very easy to develop for those who are not very tech-savvy, besides that it is equipped with free and free guides. for those who are interested in doing development.

The overall blend of teaching materials is adjusted to the achievement of the course and the objectives of the research. The e-Book teaching materials are adapted to the learning outcomes, namely learning about understanding, concepts and analyzing

local historical events during the independence era, namely the Four-Days Battle in Surakarta

Table 4. Final Display of the e-Book of the Four Days Battle in Surakarta

No.	Visual		Material	Description
	Layout	**Font**		
1.		Title: Aileron Black Bold	-	Front Cover: Photo of the City Handover Ceremony Colonel Major General F. Mollinger shaking hands with Lieutenant Colonel Ignatius Slamet Riyadi
2.		Title: Aileron Black Bold Contents: Times New Roman	Events Before the Four-Days Battle in Surakarta	Photos and material about important events before the Second Dutch Military Aggression and the Four-Days Battle in Surakarta are presented.
3.		Title: Times New Roman Contents: Times New Roman	The Four-Days Battle in Surakarta	Presented material of the ongoing battle.
4.		Contents: Times New Roman	Cease Fire and City Handover Events	Presented material regarding the events that occurred during Ceasefire as well as photos during the handover of the City from the Dutch to the Republic of Indonesia
5.		Title: Aileron Black Bold Contents: Times New Roman	e-Book Developer Profile	Contains the developer's curriculum vitae, achievements, and publication experience in the historical field.

d. Implementation (Implementation Stage)

At this stage, a product feasibility trial will be carried out by experts. Expert validation aims to determine the eligibility criteria for the developed e-Book product. Expert validation consists of material expert validation and media expert validation. Each validation expert consists of two validators who have competencies according to their fields. The following will present the results of the material media expert's assessment of the development of e-Book teaching materials.

Table 5. Results of Material Expert's Assessment of the e-Book of the Four-Days Battle in Surakarta

Num.	Aspects Assessed	Average Score	Category
1	Format	4.6	Very Good
2	Language	4.6	Very Good
3	Illustration	4.2	Good
4	Content	4.5	Very Good
	Average	**4.47**	**Very Good**

(Source: Processed from Author's Questionnaire Data, 2021)

Based on the table above, it is known that the results of material expert validation on the 'format' have an average score of 4.6 (very good), the 'language' aspect gets an average score of 4.6 (very good), the 'illustration' aspect gets a score an average of 4.2 (good), and 'content' has a score of 4.4 (very good). So, the total average score of all aspects of the assessment is 4.47 – included in the very good category (see the scoring guideline in table 1). This shows that overall, the e-Book of the Four-Days Battle in Surakarta is very good and deserves to be tested to the next stage.

Table 5. Results of Media Experts' Assessment of the Four-Days Battle in Surakarta e-Book in Surakarta

Num.	Aspects Assessed	Average Score	Category
1	Theory	4.2	Good
2	Illustration	4.5	Very Good
3	Media Display	3.8	Good
4	Attractiveness	4.3	Very Good
	Average	**4.2**	**Good**

(Source: Processed from Author's Questionnaire Data, 2021)

Based on the table above, it is known that the results of media expert validation on the 'Material' aspect have an average score of 4.2 (good), the 'Illustration' aspect gets an average score of 4.5 (very good), the 'Media Display' aspect gets an average score of 3.8 (good), and 'Attractiveness' has a score of 4.3 (very good). So, the total average score of all aspects of the assessment is 4.2 – included in the very good category (see the scoring guideline in table 1). This shows that overall, the Four-Days Battle in Surakarta e-Book is very good and deserves to be tested to the next stage.

e. Evaluation (Teaching Material Evaluation Stage)

At this stage, a product trial of teaching materials will be carried out to students. The product trial aims to assess the quality of the teaching materials developed. This product trial consists of three stages, namely a small group limited trial, a large group

limited trial, and an extensive trial. The following will show the results of product trials carried out at the evaluation stage:

1. Small Group Limited Trial

A small group limited trial was given to 5 students of the even semester History Education study program who were taking a homogeneous Local History course. The results of the trial evaluation can be seen in the following table:

Table 6. Small-Group Limited Trial Results Data

Num.	Aspects Assessed	Average Score	Category
1	Product Display	4.4	Very Good
2	Product Usage	4.9	Very Good
3	Material and Image Quality	4.9	Very Good
	Average	**4.7**	**Very Good**

(Source: Processed from Author's Questionnaire Data, 2021)

Based on the table above, it can be seen that students' responses to the 'product appearance' aspect obtained an average score of 4.4 (very good), the 'product use' aspect obtained an average score of 4.9 (very good), and the 'quality materials and pictures obtained an average score of 4.9 (very good). The number of aspects of the assessment obtained a score of 4.7 which is included in the very good category. This shows that the e-Book based on the Four-Days Battle in Surakarta which is based on the assessment of student responses in a small group limited trial is in the very good category.

In the next stage, a limited group trial was conducted. The large group limited trial involved 10 students outside the small group limited trial students. The results of the evaluation of the large group limited trial can be seen in the explanation below.

2. Large Group Limited Trial

The large group limited trial was given to 10 students of the even semester History Education study program who were taking a homogeneous Local History course. The results of the trial evaluation can be seen in the following table:

Table 7. Data of Large Group Limited Trial Results

Num.	Aspects Assessed	Average Score	Category
1	Product Display	4.5	Very Good
2	Product Usage	4.8	Very Good
3	Material and Image Quality	4.9	Very Good
	Average	**4.7**	**Very Good**

(Source: Processed from Author's Questionnaire Data, 2021)

Based on the table above, it can be seen that students' responses to the 'product appearance' aspect obtained an average score of 4.5 (very good), the 'product use' aspect obtained an average score of 4.8 (very good), and the 'quality materials and pictures obtained an average score of 4.9 (very good). The number of aspects of the assessment obtained a score of 4.7 which is included in the very good category. This shows that the e-Book based on the Four-Days Battle in Surakarta which is based on the assessment of student responses in a large group limited trial is in the very good category.

In the next stage, a large group trial was conducted. A large group limited trial involved 20 students outside of the large group limited trial. The results of the evaluation of the large group limited trial can be seen in the next presentation.

3. Extensive Limited Trial

The broad group limited trial was given to 20 students of the even semester History Education study program who were taking a homogeneous Local History course. The results of the trial evaluation can be seen in the following table:

Table 8. Data from Large Group Limited Trial Results

Num	Aspects Assessed	Average Score	Category
1	Product Display	4.3	Very Good
2	Product Usage	4.7	Very Good
3	Material and Image Quality	5.0	Very Good
	Average	**4.6**	**Very Good**

(Source: Processed from Author's Questionnaire Data, 2021)

Based on the table above, it can be seen that students' responses to the 'product appearance' aspect obtained an average score of 4.3 (very good), the 'product use' aspect obtained an average score of 4.7 (very good), and the 'quality materials and pictures obtained an average score of 5.0 (very good). The number of aspects of the assessment obtained a score of 4.6 which is included in the very good category. This shows that the e-Book based on the Four-Days Battle in Surakarta which is based on the assessment of student responses in a broad group limited trial is in the very good category.

4.2 Discussion

Based on the explanation above, the results of research on the development of e-Book teaching materials based on the Four-Days Battle in Surakarta in the Local History course for history education students are very good and also suitable to be used as teaching materials that support the learning process in the classroom. This is because these teaching materials have been systematically designed and compiled according to research development procedures. In addition, this e-Book teaching material can build creativity and innovation in history learning. In other words, it helps students easily accept learning materials and for lecturers, it can help to plan and study the implementation of learning.

The Four-Days Battle in Surakarta was not only able to evoke the spirit of nationalism or about the severity of the struggle, but also related to the preservation of local history in the Surakarta area itself. A local history is an object that is very close to students, if it can be combined with teaching materials, it will lead to attractive learning as well. Whereas the important role of local history is a description of historical writing within the scope of an area that has a certain locality or is often also known as a spatial element (Widja, 1991: 13). In line with the explanation above, Carroll (2003: 4) also sees local history as a study of past events that have been passed by a person or group within a certain geographical area. An event that is truly based on various authentic documentary evidence and is placed in a comparative context that is both regional and national. Then Hariyono (2017: 166) also argues that the uniqueness of history in the surrounding environment is considered as part of the local genius. So that we can learn from the aspects contained in local historical events.

At this time, several previous studies have also carried out this development and have proven effective and feasible to be used as teaching materials for various kinds of historical material content spread at the high school to university level. For example, research by Dwi Puji Astuti, Siswandari, Djoko Santoso conducted research entitled E-Book for Problem Based Learning to Improve Learning Outcome of the Students which was published in Advances in Social Science, Education and Humanities Research

(ASSEHR), Volume 158 International. Conference on Teacher Training and Education 2017. Changes in the use of learning media where electronic books (called e-Books) are starting to develop today replacing previous books that were used manually. The research problem is that learning is still done conventionally and has not used various learning media, so students understand poorly the learning material, which leads to low learning outcomes. This Problem-Based Learning-based e-Book learning media is one of the innovative learning media that can provide active learning conditions for students.

In addition, Abd Mutalib Embong, Azelin M. Noor, Hezlina M. Hashim, Razol Mahari Ali, Zullina H. Shaari conducted research entitled E-Books as Textbooks in The Classroom which was published in Procedia - Social and Behavioral Sciences 47 (2012) 1802 – 1809. The research indicates that e-Books offer students, teachers, and schools additional media or instructional tools that can support or enhance the learning process. So far, the use of e-Books is limited to students. Using e-Books as textbooks in classrooms in schools is a new paradigm, especially in developing countries.

Based on various previous research results, the development of e-Book teaching materials based on the Four-Days Battle in Surakarta can attract students' interest in the history learning process. This study can guide lecturers and history teachers, especially at the Veteran Bangun Nusantara University, to develop innovative digital learning that integrates local history. One of the innovative teaching materials is the e-Book teaching material based on the Four-Days Battle in Surakarta.

IV. Conclusion

Based on the research results and discussion, it can be concluded that the validation of material experts and media for the development of e-Book teaching materials based on the Four-Days Battle in Surakarta is valid with a very good category. The results of the small group limited trial, large group limited trial, and wide group trial shows that the e-Book teaching materials based on the Four-Days Battle in Surakarta are included in the very good category and deserve to be used as teaching materials in the Local History course. as well as other subjects relevant to the discussion of the Indonesian People's Struggle. This is also by the needs of lecturers and students in achieving the learning objectives of the Local History course at the History Education Study Program, Veteran Bangun Nusantara University.

The use of e-Book teaching materials based on the Four-Days Battle in Surakarta in lectures is very practical and can be accessed for free, quickly, easily on the Word Press platform. This also indicates that the ease of access is an added value for this product. In addition, digital products combined with historical content are an innovation in history learning.

References

Adhi, Irawan Sapto. Solopos.com. (25 April 2016). CAGAR BUDAYA SOLO: Keraton Kewalahan Cegah Aksi Vandalisme. Diakses pada 10 Maret 2020. https://m.solopos.com/cagar-budaya-solo-keraton-kewalahan-cegah-aksi-vandalisme-713852/

Aman. (2011). Model Evaluasi Pembelajaran Sejarah. Yogyakarta: Ombak.

Analisa, F. C. K. (2019). Dampak Revitalisasi Terhadap Aktivitas Vandalisme di Kawasan Kota Lama Semarang. Jurnal Arsitektur KOMPOSISI, Volume 12, Nomor 2. Halaman. 97-103.

Angel Learning, (2008.) Instructional Design in ANGEL. Indianapolis: Angel Learning.

Inc.

Astuti, D., & Santosa, D. (2017, October). E-Book for Problem Based Learning to Improve Learning Outcome of the Students. In International Conference on Teacher Training and Education 2017 (ICTTE 2017) (pp. 403-410). Atlantis Press.

Astuti, R.W., Waluyo, H.J., and Rohmadi, M. (2019). Character Education Values in Animation Movie of Nussa and Rarra. Budapest International Research and Critics Institute-Journal (BIRCI-Journal). P. 215-219.

Borg, W.R. & Gall, M.D. Gall. (1983). Educational Research: An Introduction. Fifth Edition. New York: Longman.

Christensen, H.H., Johnson, D.R. and Brookes, M.H. (1992). Vandalism: Research, Prevention, and Social Policy (Vol. 293). US Department of Agriculture, Forest Service, Pacific Northwest Research Station.

Cumaoglu, G., Sacici, E., & Torun, K. (2013). e-Book Versus Printed Materials: Preferences of University Students. Contemporary Educational Technology, No. 4(2), Page. 121-135.

Dewantara, K.H. (1977). Karya Ki Hadjar Dewantara Bagian Pertama: Pendidikan. Yogyakarta: Majelis Luhur Persatuan Taman Siswa.

Embong, A. M., Azelin, M. N., Mohd Hashim, H., & H Shaari, Z. (2012). E-Books as Textbooks in the Classroom. Procedia - Social and Behavioral Sciences Vol. 47. Page: 1802-1809.

Gottschalk, L. (2008). Understanding History: A Primer Historical Methods, ab. Nugroho Notosusanto. Mengerti Sejarah. Jakarta: Universitas Indonesia Press.

Hariyono, H. (2017). Sejarah Lokal: Mengenal Yang Dekat, Memperluas Wawasan. Sejarah dan Budaya: Jurnal Sejarah, Budaya, dan Pengajarannya, 11(2), 160-166.

Hariyono. (1995). Mempelajari Sejarah Secara Efektif. Jakarta: Pustaka Jaya

Januszewski, A., & Molenda, M. (Eds.). (2013). Educational Technology: A Definition with Commentary. London: Routledge.

Kartodirjo, S. (1992). Pendekatan Ilmu Sosial dalam Metodologi Sejarah. Jakarta: Gramedia Pustaka Utama.

Nichol, Jon. (1984). Teaching History: A Teaching Skills Workbook (Focus on Education). London: Nelson Thornes (Publishers) Ltd.

Pradana, D.A. (2020). Nasionalism: Character Education Orientation in Learning Development. Budapest International Research and Critics Institute-Journal (BIRCI-Journal) Vol 3 (4): 4026-4034.

Putra, N. (2012). Reseacrh & Development, Penelitian dan Pengembangan Suatu Pengantar. Jakarta: PT. Raja Grafindo Persada.

Rosyid, Ichsan. Timlo.net. (16 Desember 2019). Pemkot Bongkar Bangunan Bersejarah, Komunitas Pecinta Sejarah Sebut Vandalisme. Diakses pada 10 Maret 2020. https://timlo.net/baca/76326/pemkot-bongkar-bangunan-bersejarah-komunitas-pecinta-sejarah-sebut-vandalisme/

Scott, Michelle L., Nancy G. La Vigne, and Tobi Palmer. (2007). Preventing Vandalism. Washington, DC: The Urban Institute Justice Policy Center.

Suarabaru.id. (17 Januari 2020). Tugu Jam Pasar Gede Jadi Sasaran Vandalisme. Diakses pada 10 Maret 2020. https://suarabaru.id/2020/01/17/tugu-jam-pasar-gede-jadi-sasaran-vandalisme/

Sudijono, Anas. (2005). Pengantar Evaluasi Pendidikan, Jakarta: Raja Grafindo Persada.

Sudjana, N. (2013). Teknologi Pengajaran. Bandung: Sinar Baru Algensindo.

Wardhana, I. P., Muhadi, M., & Sanjaya, A. (2019). Keterlibatan Tentara Pelajar Pada Serangan Umum Empat Hari di Surakarta Tahun 1949. KERATON: Journal of History Education and Culture. Vol. 1, No. 1, Juni 2019.

Widja, I Gde. (1991). Sejarah Lokal Suatu Perspektif Dalam Pengajaran Sejarah. Bandung: Penerbit Angkasa.

Yoedoprawiro, H., Sugihwaras, S., & Boediono (Eds.). (1999). Makna Ofensif Empat Hari di Solo Dalam Perjuangan Kemerdekaan Indonesia 1945-1949. Jakarta: Dewan Redaksi Sejarah Ex Anggota Detasemen II Brigade 17.

Yoedoprawiro, H., Sugihwaras, S., & Boediono (Eds.). (2000). Ofensif TNI Empat Hari di Sala dan Sekitarnya. Jakarta: Dewan Redaksi Sejarah Ex Anggota Detasemen II Brigade 17.