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## E-MAGAZINE TIME (EMT)-BASED DEVELOPMENT OF HISTORY LEARNING MEDIA IN THE PANDEMIC ERA

Muhjam Kamza<sup>1\*</sup>, M Yusrizal<sup>2</sup>, Ayu Noviana<sup>3</sup>

<sup>1,3</sup>Jurusan Pendidikan Sejarah, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Syiah Kuala, Banda Aceh, 23111, Indonesia;

<sup>2</sup>SMA Negeri 2 Kota Banda Aceh, Indonesia;

e-mail: [1\\*muhjam.kamza@usk.ac.id](mailto:1*muhjam.kamza@usk.ac.id), [2myusrizallatief@gmail.com](mailto:2myusrizallatief@gmail.com), [3ayunoviaana@gmail.com](mailto:3ayunoviaana@gmail.com)

### ABSTRAK

Wabah Corona Virus Disease (Covid-19) sudah banyak merubah pola aktivitas manusia, tidak terkecuali dunia pendidikan. Pembelajaran tatap muka yang lazim digunakan kini harus diganti dengan pembelajaran secara daring (online) Penelitian ini bertujuan menawarkan media baru dalam pembelajaran sejarah, baik di lingkup pendidikan formal maupun non formal. Media dimaksud adalah E-Majalah Waktu berbentuk digital, memuat suatu peristiwa sejarah yang disusun secara runut dan singkat serta memenuhi konsep ruang dan waktu dalam pengertian sejarah. Majalah Waktu disinyalir sebagai media pembelajaran baru yang coba ditawarkan peneliti kepada dunia pendidikan, terlebih kepada pembelajaran yang dilakukan melalui media elektronika secara daring. Penelitian ini menerapkan metode Research and Development (R&D) dengan model Decide, Design, Development, dan Evaluation (DDD-E). Tahapan decide mencoba melakukan observasi lapangan dan studi literatur. Setelahnya melakukan tahapan design untuk membuat garis besar konten pembelajaran. Development merupakan proses pembuatan media pembelajaran E-Majalah Waktu digital dengan aplikasi Canva berbantuan Heyzine Flipbook. Serta tahapan terakhir yaitu evaluation, meliputi penilaian ahli materi, ahli media, ahli pembelajaran, dan penilaian peserta didik demi menghasilkan media pembelajaran yang layak. Setelah melewati tahapan pengujian, E-Majalah Waktu dinyatakan layak untuk diaplikasikan dalam pembelajaran sejarah untuk semua jenjang pendidikan baik di ranah pendidikan formal maupun non formal.

**Kata Kunci:** Pandemi, Majalah Waktu, E-Majalah, Canva, Heyzine Flipbook.

### ABSTRACT

*The Corona Virus Disease (Covid-19) outbreak has changed the pattern of human activity, including the world of education. Face-to-face learning that is commonly used now must be replaced with online learning. This study aims to offer a new media in history learning, both in the scope of formal and non-formal education. The media in question is E-Magazine Time in digital form, containing all historical events that are arranged sequentially and briefly and fulfills the concept of space and time in a historical sense. E-Magazine Time is allegedly a new learning media that researchers are trying to offer to the world of education, especially learning that is carried out through electronic and online media. This study uses the Research and Development (R&D) method with the Decide, Design, Development, and Evaluation (DDD-E) model. The decide stage tries to conduct field observations and literature studies. After that, carry out the design stage to create an outline of the learning content. Development is the process of creating digital E-Majalah Waktu learning media with the Canva application assisted by Heyzine Flipbook. And the last stage is evaluation, including assessments by material experts, media experts, learning experts, and student assessments in order to produce appropriate learning media. After going through the testing stages, E-Majalah Waktu was declared appropriate to be applied in history learning for all levels of education, both in formal and non-formal education.*

**Keyword:** Pandemic Era, E-Magazine Time, Canva, and Heyzine Flipbook

## INTRODUCTION

The discovery of pneumonia on December 31, 2019, in Wuhan, China, shocked the world. Pneumonia is an infection caused by bacteria, viruses, or fungi that makes the lungs swell up (Lee, 2020). The Corona Virus Disease-2019 (Covid-19), which spread so quickly that it was called a pandemic, was the cause of this epidemic. On May 17, 2020, the World Health Organization (WHO) reported that Covid-19 had reached 4,534,731 positive cases and had spread to 216 countries. Early in March 2020, it was known that the deadly virus was in Indonesia and that it had spread to all parts of the country. As many as 35,577 people in Aceh Province and 11,315 people in Banda Aceh City tested positive for Covid-19 (Info Covid-19, 2021).

The government has started to put out different policies, like letting people study and learn from home, to stop the virus from spreading. The use of digital technology is one way that the world community is trying to replace many face-to-face activities. The pandemic has changed how people around the world interact, and digital technology is being used to help people adjust. The world community has no choice but to take full advantage of its ability to adapt to new learning technologies and innovations because of this condition. With the help of new technologies, it will be possible to change the way people live and even make changes to what is already there (Christensen et al., 2015; Nurtjahjanti et al., 2021). In the middle of the Covid-19 pandemic and educational upheaval, teachers and lecturers must be able to devise innovative ways to communicate knowledge that is engaging and simple for pupils to comprehend.

The current Covid-19 epidemic in Indonesia has necessitated physical separation in all activities, including teaching and studying at schools and universities. Numerous schools and colleges in Indonesia have initiated online or e-learning programs. Implementation of

the online teaching and learning process in accordance with Circular No. 36962 of 2020 about online learning and working from home in an effort to limit the spread of Covid19. The Ministry of Education, Culture, Research, and Technology (Kemendikbudristek) encourages employees, teachers, and lecturers to complete work, teach, or study activities at home (homework) utilizing videoconferencing, digital documents, and other relevant means (Surat Edaran Menteri Pendidikan Dan Kebudayaan Republik Indonesia Nomor 36962/MPK.A/HK/2020, 2020).

In the midst of a pandemic, it is essential that educational facilities be adopted. Some parties are accustomed to digital learning, but the majority of educational institutions must adapt to it. The digitalization of education presents chances for a paradigm change. In the face of a pandemic or in the era of digitalization, however, digital learning is deemed to be highly applicable at the moment (Algeo et al., 2021).

E-learning is a way to learn that uses electronic communication technology like text, audio, images, animation, and video. When e-learning is put into place, it leads to the use of a number of learning tools. E-learning can make education cheaper, make it easier to get content, help people grow, and give more people the chance to learn. E-learning is seen as a way to keep the curriculum up-to-date and add more to it (Sethe et al., 2019). During the months of August, September, and October 2020, there was a considerable growth in the use of mobile-learning devices. The data rose by 36 percentage points, from 45 percent to 81 percent. This increase also has a 71 percent beneficial effect on learning, from 24 percent to 95 percent. However, there are 61 percent more learning hurdles from 15 percent to 76 percent. Continuity of learning also has obstacles ranging from 20 to 43 percent, or 23 percent (Thohir et al., 2021).

The unprecedented implementation of distance education by students, teachers/lecturers, and parents was tested simultaneously during the Covid-19 pandemic (Sun et al., 2020). For the purposes of e-learning, a device such as a personal computer (PC), laptop, smartphone, or tablet that is connected to the internet can be utilized. In this context, learning and teaching are able to make use of platforms such as applications, websites, learning management systems, and social networks (Gunawan, Gunawan and Suranti, Ni Made Yeni and Fathoroni, 2020). It is possible to draw the conclusion that digital media has the potential to improve learning in a positive way (Sumardi & Muamaroh, 2020).

The Syiah Kuala University (USK) in Banda Aceh took part in online learning despite the fact that it is located in the Red Zone for the transmission of the Covid-19 virus. The education that is provided at USK is delivered using a variety of online platforms, including WhatsApp (WA), Microsoft 365, Google Classroom, Instagram, Telegram, Zoom Application, and Unsyiah e-learning, in addition to other types of educational media. Because of this, professors are in a better position to ensure that students may continue to effectively participate in the teaching and learning process on campus. Even with the pandemic, students can still participate in meaningful ways in their educational experiences. The university, which is known as "*jantong hate rakyat Aceh*" (Heart of the Acehnese People) in local parlance, is expected to serve as a model and a patron of learning for other educational institutions located in Aceh and even across the country.

Many problems develop within the framework of e-learning systems, and these problems are experienced by both students and teachers. Researchers have identified a number of problems with e-learning, and as a result, many students report that they are disinterested and bored with their participation in online learning. One of the reasons is that

students have difficulty understanding the material presented by the lecturer. This is the most pressing problem that must be solved as soon as possible. Not only other students, teachers also feel dissatisfied with the lack of enthusiasm of students in the actual learning process.

In light of the issues described above, the researchers conducted E-Magazine Time (EMT) development in an effort to identify potential solutions to the problem and reduce its impact. Although most members of the general public are aware with the phrases magazine and e-magazine (electronics digital magazine/online magazine), there are some groups of people that consider magazines to be on par with books (McLoughlin, 2000). Magazine can be defined as a print media that contains information and also contains certain advertisements that are presented to the public.

The word "magazine" itself describes modern content that is often endorsed by advertisements or sponsors and published in the form of print media. In most cases, periodicals such as magazines are published on a weekly, monthly, or quarterly basis. At the present stage of the medium's evolution, there is a diverse range of magazines available, each of which offers specialized informational services to the readers of its respective publication (Holmes & Nice, 2012). The most important aspects of publishing magazines are as follows: (1) always targeting the right audience; (2) basing its content on the needs, wants, hopes, and fears expressed and felt by the audience; (3) developing a bond of trust with the audience; (4) encouraging interaction such as community among audiences; and (5) having the ability to respond quickly to changes in the number of audiences and changes in society (Sternadori, 2020).

People who utilize EMT for the purpose of learning are considered to have a sort of digital literacy. In this context, the term "digital literacy" refers

not only to the capability of using computers for writing and reading purposes, similar to general literacy, but also to a set of fundamental skills in using computers, participating in social networks to create and share knowledge, and sharing professional computing skills. In other words, digital literacy encompasses all of these activities (Tour, 2015). A person who is proficient in digital literacy will see improvements in their academic performance as well as other aspects of their lives, so that society can react to the use of technology more intelligently, and digital literacy becomes a significant concern (Kamza & Yusrizal, 2024). Stutterers in today's society, for instance, typically struggle to adapt to the social contacts they have because of their reliance on various forms of modern technology.

Digital literacy is navigation for internet users who feel intimidated by the ever-advancing scope of the internet. Digital literacy also supports the role of the internet in conveying information and preserving knowledge. As a digital literacy navigation, it is also useful for critically examining internet content, both for experienced users and beginners who are entering the world of digital information (Gilster, 1997). Digital literacy can also be thought of as being able to understand and share information. Digital literacy is a term used in the computing curriculum to make sure that students can: 1) evaluate and use information technology, including new or foreign technologies, to solve problems; 2) use information and communication technology in a way that is responsible, competent, confident, and creative (Savage & Barnett, 2015). Digital literacy itself has three concepts and developments: (1) as an automatic process, (2) as a set of skills, and (3) as a socio-cultural perspective on digital literacy (List, 2019). However, the most significant obstacle to overcome in order to achieve digital literacy is the rapid expansion of information into all aspects

of human existence (Rusydiyah et al., 2020).

To facilitate learning and teaching in universities related to digital literacy, lecturers are required to design strategies to increase student engagement online (Beck et al., 2021). Students will be able to establish a learning environment through the use of digital learning that will allow them to acquire academic abilities as well as skills to confront the challenges of the current period of the 21st century. Because digital learning in digital courses is particularly effective in broadening students' discovery of information and comprehension, it is necessary for all educational institutions to encourage or promote its use (Fausan et al., 2021; Mashhadi & Kargozari, 2011).

The name EMT can refer to its historical implementation. History learning materials that tend to contain the date, month, year, names of characters, names of events, and places of events. This is a separate problem for students to understand the presentation of the information, moreover the concept of learning history requires a systematic understanding of the material. EMT contains important events in a historical theme which is summarized in the form of periodization. It is hoped that it will make it easier for students to remember the historical plot in a historical theme. Learning to use the media in question seems to lead the imagination of students to enter time portals in the past, it is hoped that the exploration of space and time can increase students' interest in learning.

The EMT is developed in a digital format in order to make it easier for teachers and students to access it for use in educational activities. Students will be more interested in contextual learning media since it is pertinent to real life events that are now being experienced, such as the pandemic epidemic caused by the COVID-19 virus. In order to make learning feel more 'alive,' teachers should encourage students to engage in activities such as questioning, discussing, actively

interacting, observing, practicing, problem-solving, reflecting, and practicing (Saputri & Amaria, 2013).

Based on what has been conveyed, it arouses the curiosity of the author in conducting a study of the development of E-Magazine Time (EMT) during the Covid-19 pandemic. The purpose of this research is to contribute a fresh learning media to the field of history education. EMT is expected to be the right learning media to be used in history learning during the pandemic. This is because EMT is one of the most effective solutions to overcome the problem of educational disruption in the midst of the 4.0 and 5.0 revolutions (super intelligent society).

## METHODS

In this study, the research and development (R&D) method is used with 3D and 1E models to create the development mechanism. This development model gives a flow to the process of preparing a project, but it can also be changed to fit the needs of each person. This development model also gives you a framework for making multimedia projects, and it doesn't get rid of the constructivist approach to planning or making individual projects. This model is made up of 4 steps: decide, design, build, and evaluate (DDD-E) (Ivers & Barron, 2010). The processes involved in the production of EMT-based history learning materials are illustrated in Figure 1.

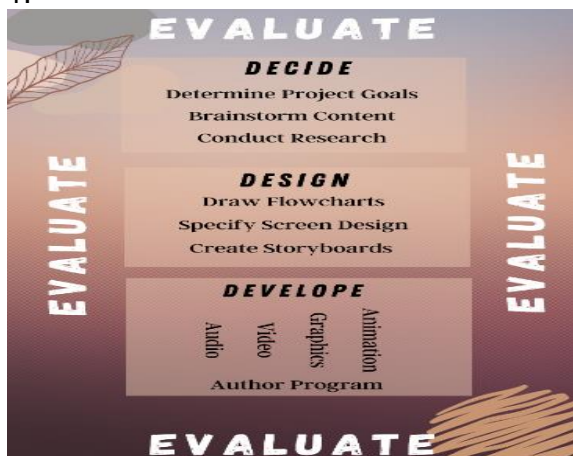


Figure 1: DDD-E Model Development Flow

This research development process is procedural research that has been carried out in accordance with the stages outlined by the DDD-E model. The final result of this research is an EMT-based historical learning media which was developed as a product. After the finished product is produced, it is then evaluated by subject matter experts, media experts, learning experts, and also students in their capacity as media users. In the future, this media is expected to develop into a fresh and efficient media that can be utilized in the process of acquiring historical knowledge.

## RESULTS AND DISCUSSION

### 1. History Learning Media Development Process Based on E-Magazine Time

The continuously changing nature of digital technology has a tremendous impact on how we live our lives. From buying, to chatting, to playing and working, digital technology has revolutionized the way we connect with one another and the environment around us. Education is no less influenced. The expansion of the internet and related technologies has resulted in the adoption of online teaching and learning into the normal practice of higher education institutions (Haythornthwaite & Andrews, 2011). Online learning uses digital devices like desktops, laptops, tablets, and cellphones to support learning (Clark & Mayer, 2016). One of the potential benefits of online learning is the capacity to transcend time and location limitations in education. As such, it affords students the freedom to select when, where, and how to study (Bates, 2005). Another benefit of this form of learning is greater equity of access. People who were previously excluded from education due to location, personal circumstances, financial constraints, disability, or lack of course availability, can now participate in education. Apart from the advantages of

flexibility and equitable access that online learning offers, various factors have been identified as critical to the success of online learners. The main factor is concern over learner motivation in online education (Bekele, 2010). Concerns about the decline in motivation for learning history may be overcome with digital EMT which will be developed with the DDD-E step.

This media development procedure consists of four main steps consisting of Decide, Design, Develop, and Evaluate (DDD-E). Decide, is the initial stage in determining the objectives of the project to be carried out, followed by the preparation of guidelines and initial planning in carrying out project development. Design, is the stage in determining the program and the details of the contents of the project to be developed. Develop, which is the production stage of media development, and finally Evaluate, the stage of assessing the effectiveness of the media that has been developed. The flow of the development of the EMT is as follows:

a) Determination Stage (Decide)

The researcher decides the type of media that will be created at this stage. The basis for identifying this development consists of researchers' observations or comments on the learning process. Referring to the pandemic-stricken status of the world, the field of education has a "negative" impact that must be addressed immediately. Effective learning, which is frequently used offline (offline), must be replaced online, and teachers and professors have concerns regarding the delivery of instructional materials. For educators who are less "acquainted" with the digital environment, this will further complicate the effectiveness of student learning. As long as other learning mediums are not incorporated, the availability of videoconferencing tools like zoom and google meet is judged insufficient for education. Educator-dominated learning, also known as

teacher-centered learning, typically results in boredom among students.

This issue is becoming increasingly "important" for students taking history courses. Learning history that stresses learning from two directions (two-way communication) is currently as if students can only accommodate material delivered by lecturers/teachers via PowerPoint media. Studies undertaken at Syiah Kuala University aimed at the Department of History Education have identified the source of the issue. It has been demonstrated that students reach saturation due to the repetitious processing of instructional content. This requires urgent follow-up for successful learning, without justification for the Covid-19 pandemic. This study aims to provide "Magazine Time" in digital format in order to enhance internet-connected education's access to learning materials.

It is considered that EMT in history learning is beneficial because history incorporates the concept of location and time. Refers to the understanding of history as the interaction between the historian and the obtained data, or as an unending conversation between the present and the past. In order to investigate time portals in the past, history possesses both a spatial dimension (space) and a temporal dimension (time) (time). The spatial dimension describes the location of a historical event, whereas the temporal dimension investigates when (in terms of time) the event or historical event occurred. The purpose of studying history is to comprehend past, current, and future human behavior (Grinchenko & Shchapova, 2010).

Time-magazine media in history lessons should include three timelines (past, present, and future) and sequenced historical events. Using EMT to learn is thought to reduce student boredom. Students will be allowed to take a virtual historical journey of the past space. The study room will be a historical "the place" for studying and playing.

Based on the foregoing observations, historical learning needs EMT learning medium to achieve active, effective, and interactive learning between students and lecturers. Through EMT, students and lecturers can explore historical space and time without leaving the study room.

#### b) Design Stage (Design)

Visual content is an integral component of representation in virtual media, including social media platforms, blogs, and webpages. Good graphic components in a medium increase the audience's attention in the offered information. Creating visual material is not a simple task, especially when it requires the application of specialized tools. However, the availability of an intuitive application facilitates the creation of media or visual material by a content developer.

Canva is one of the most widely used design programs by the public. Canva is an easy-to-use program for creating digital media or graphic content, especially for inexperienced users, in addition to this function being free. Canva is not only accessible online, but also via desktop and mobile, making it easier for users to work on designs whenever and wherever they choose. In addition to being free and simple to use, Canva boasts an abundance of features that distinguish it from other design applications. Logos, infographics, posters, featured photos, newsletters, newsletters, social media content, product packaging designs, invoices, YouTube thumbnails, and advertising promotion banners are some of the features that may be edited using Canva.

Canva, aided by Heyzine Flipbook, is without a doubt the ideal software for working on the EMT. Because using multimedia will alter kids' perspectives on learning history. The presence of multimedia has the potential to improve the direction of education, particularly within the subject of educational engineering. So as to facilitate student comprehension of lecture information.

Every student of history is required to read the book that served as the basis for the compilation of the EMT. Since the publication that they are interested in working on is a magazine, the photographs of historical events that they need in order to make those events more appealing may be found on the websites of numerous historical institutions. Using Canva, the researcher attempted to build a lesson plan for teaching history using the A4 document format. This was done so that the lesson may be uploaded to EMT.

Users are prompted to the "make a design" menu when entering the EMT design stage. This menu presents the user with options for creating visual material, and the researcher attempts to select the content of the A4 page. After selecting the content type, the Canva editing page will be displayed. It is recommended at this point in the design process, in order to make things easy for users, to determine the background first. Regarding the background, users can select "Photos" or "Background." According to the historical point you wish to make, it is suggested that you utilize "Photos" in this study. After selecting photographs as the board for designing (insert material), user will alter the selected background image's size, color, brightness, contrast, and saturation.

After ensuring that the background is flawless, the user is instructed to enter text by clicking the "Text" menu. Researchers deem this stage crucial since the contents of the learning material will be described succinctly and in depth, and will adhere to the chronology of historical space and time (the place and date of historical events). After ensuring that the content in the EMT is flawless and worthy of publication as a learning medium, user approach the export phase as a digital magazine with the assistance of Heyzine Flipbook.

#### c) Development Stage (Development)

EMT is an educational resource created using the Canva program and

Heyzine Flipbook. After the magazine product has been produced in Canva, users are prompted to use Heyzine Flipbook to convert the design into a book (magazine). Heyzine Flipbook is included into the Canva application, eliminating the requirement for users to load files separately.

Heyzine Flipbook is a product of three-dimensional e-book technology, in which users can open page by page on the monitor screen in a manner similar to opening the actual book (Riyanto, 2012). The use of Heyzine Flipbook is regarded vital because the non-monotonic display enables pupils feel at ease when reading magazines on a computer screen for extended periods of time. Figure 2 depicts the appearance of the EMT created using the Canva tool and Heyzine Flipbook.



Figure 2. Heyzine Flipbook Display

d) Evaluation Stage (Evaluation)

The evaluation phase aims to examine and appraise the previous phases, determine, plan, and develop. The evaluation seeks excellent results from the learning materials. In order to determine the viability of the EMT learning media, it was subjected to a battery of tests conducted by material experts, media experts, learning experts

(lecturers), and student trials (respondents) (Yusuf & Cahyati, 2017).. Appropriate learning media are produced through a sequence of media cultivation techniques. Before the learning medium in question is distributed and utilized for history education, the data gathered over the preceding steps serves as a guide for making adjustments or enhancements.

The validation results from subject matter experts indicate that the EMT learning media meets the "suitable" criteria, hence the choice does not need to be reconsidered. While the media expert completed a two-stage assessment, the initial stage was "good enough" but the decision required revision, however the second stage, following the revision of the learning media, was "suitable" with a conclusion that did not require revision. In addition, the evaluation from learning specialists yields a "very decent" grade; no change is necessary. And finally, the evaluation of pupils who have acquired "acceptable" qualifications does not require adjustment. The assessment stages that have been completed indicate that EMT is an appropriate learning medium for use in history education.

The evaluation was conducted, and it was determined that EMT is an adequate and effective learning tool for history study. The evaluation formula utilized at all stages of this research is as follows:

$$P = \frac{\sum xi}{\sum xj} \times 100$$

Information:

P : Eligibility Percentage

$\sum xi$  : The overall score of the validator's evaluation responses

$\sum xj$  : The highest number of answer scores Table 1. Eligibility level qualification scale.

NO	PERCENTAGE	QUALIFICATION	DECISION
1	0-54%	Not Feasible	Total Revision
2	55-64%	Less Worthy	Need Revision
3	65-79%	Decent Enough	Need Revision
4	80-89%	Worthy	No Revision Needed
5	90-100%	Very Worthy	No Revision Needed

Source: (Tegeh & Kirna, 2010)



## 2. EMT Media Eligibility

### a) Eligibility Based on Material Expert Assessment

The expert evaluation of the content attempts to measure four parts of the assessment: 1) the appropriateness of the material, 2) the consistency and clarity of the material, 3) the language, and 4) the influence on the user. The 15 assessment indicators that are discussed below are derived from these four different features of the material and are tested by subject

matter specialists. The evaluation carried out by subject matter specialists for the purpose of this investigation yielded a total score of 51 points, with a feasibility percentage of 85%. According to the figure, the qualifications are "adequate," and the conclusion states that there is "no need for adjustment." Table 2 presents the results of the expert's evaluation questionnaire regarding the material.

Tabel 2. Material Expert Assessment Questionnaire

NO	ASPECT	INDICATOR	SCORE			
			1	2	3	4
1	Material Suitability	<ul style="list-style-type: none"> <li>▪ Material suitability, core competencies, and basic competencies</li> <li>▪ According to indicators, core competencies and basic competencies</li> <li>▪ Appropriate materials, evaluations, basic competencies, and indicators</li> </ul>			√	
2	Material Accuracy and Clarity	<ul style="list-style-type: none"> <li>▪ Materials with appropriate learning objectives</li> <li>▪ Exact material coverage</li> <li>▪ Clear material concept</li> <li>▪ Easy understanding of the material</li> <li>▪ The material presented is systematic</li> <li>▪ Material interest</li> <li>▪ Concepts with appropriate student cognitive development</li> <li>▪ Complete material</li> </ul>			√	
3	Language	<ul style="list-style-type: none"> <li>▪ The language used is precise and consistent</li> </ul>				√
4	Effects for users	<ul style="list-style-type: none"> <li>▪ Easy to understand language</li> <li>▪ Increased knowledge and insight of students</li> <li>▪ Support given to students' self-reliance exercises</li> </ul>			√	
<b>Amount</b>			<b>0</b>	<b>0</b>	<b>27</b>	<b>24</b>
<b>Total Number</b>			<b>51</b>			
<b><math>P = \frac{\sum xi}{\sum xj} \times 100</math></b>			<b>85%</b>			

### b) Eligibility Based on Media Expert Assessment

The media expert will validate the evaluation based on four criteria: 1) visual appeal, 2) product effectiveness, 3) language, and 4) user impact. Experts in the media attempt to describe the evaluation of the four aforementioned factors using 13 indicators. Early-stage media assessment receives an average score of 38, with a media eligibility rate of 73.07 percent. The qualifying scale for the degree of lift eligibility is deemed highly realistic, however adjustment is required.

In an effort to improve the EMT media, researchers made adjustments based on media expert suggestions,

focusing on the following indicators: 1) the suitability of the color selection, 2) the suitability of the background selection, and 3) the suitability of the image selection. After the researcher completed the revision of refinements, the media expert tried to convey the evaluation of stage 2. The overall EMT learning material received a weighted score of 45 and a feasibility level of 83.5% in the second stage. In this second iteration, EMT is placed on a "good" qualification scale; no further revision is required. A comprehensive evaluation of media specialists is shown in Table 2.

Table 3. Media Expert Assessment Questionnaire

NO	ASPECT	INDICATOR	MEDIA SCORE 1				MEDIA SCORE 2			
			1	2	3	4	1	2	3	4
1	Visual display	Choose the right color		√					√	
		Choosing the right typeface			√					√
		Choose the right font size			√				√	
		Choosing the right background		√					√	
		Attractive design				√				√
2	Product effectiveness	Choosing the right image		√					√	
		Easy to use			√					√
		Clear instructions			√				√	
3	Language	Clear navigation			√				√	
		The language used is precise and consistent			√					√
4	Effects for users	Easy use of language			√				√	
		Increased knowledge and insight of students			√					√
		Support given to students' self-reliance exercises				√				√
<b>Amount</b>			<b>0</b>	<b>6</b>	<b>24</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>21</b>	<b>24</b>
<b>Total Number</b>			<b>38</b>				<b>45</b>			
<b><math>P = \frac{\sum xi}{\sum xj} \times 100</math></b>			<b>73,07%</b>				<b>83,5%</b>			

### c) Eligibility Based on the Assessment of Learning Experts (Lecturers)

Learning specialists have also conducted research to validate the practicability of various forms of educational media. Educators are parties who have the right to provide a feasibility assessment of a learning media, and this includes tutors, teachers, and also lecturers. Educators can take on any of these roles. Learning specialists are given the opportunity to evaluate five components of the E-Majalah Time learning media. These factors include 1) the structure of the content, 2) the

teaching material items, 3) the language, and 4) the impacts for users. These four components gave rise to the development of 16 assessment indicators, which ultimately obtained 61 scores for a total eligibility rate of 95.3 percent. According to the opinions of several learning specialists, the qualification scale for the feasibility level of the Time Magazine learning medium exists in a very feasible hierarchy and does not require any adjustment. Table 4 provides other information, which can be viewed.

Table 4. Learning Expert Assessment Questionnaire (Lecturer)

NO	ASPECT	INDIKATOR	SCORE			
			1	2	3	4
1	Material placement	Clear material content				√
		Interesting material content				√
		Complete material			√	
		Easy to understand the material				√
2	Teaching material products	Easy to use				√
		Clear view				√
		Attractive view				√
		Choosing the right type and font size				√
		The level of attractiveness of the image illustration in the display				√
		appropriate choice of background				√
		Choose the right color			√	
3	Language	Image presentation display				√
		Appropriate and consistent language is used				√
		Easy language				√

4	Effects for users	<ul style="list-style-type: none"> <li>comprehension</li> <li>Increased knowledge and insight of students</li> <li>Support given to students' self-reliance exercises</li> </ul>			√					√	
<b>Amount</b>			<b>0</b>	<b>0</b>	<b>9</b>	<b>52</b>					
<b>Total Number</b>							<b>61</b>				
<b><math>P = \sum xi / \sum xj \times 100</math></b>							<b>95,3%</b>				

d) Eligibility Based on Respondent's Assessment (Student)

Tests of EMT learning media have been conducted using students as respondents and later users of this medium. The students of the Department of History Education of Syiah Kuala University, Banda Aceh, participated in this feasibility test. This exam was administered to 38 students in the History of Indonesian Independence course. There are two factors that are evaluated,

namely the product of instructional materials and the influence on users. Eight assessment indicators were derived from these two aspects. The overall score of 30 points, with a percentage of eligibility of 93.75 percent, qualifies the candidate; therefore, the choice does not need to be reconsidered. Table 5 displays the evaluation's specifics.

Table 5. Questionnaire Assessment of Respondents (Students)

NO	ASPECT	INDIKATOR	SCORE			
			1	2	3	4
1	Teaching material products	Interesting view				√
		Content with a clear view				√
		Clear instructions			√	
		Easy access and operation				√
		Easy to understand language				√
2	Effects for users	Increased knowledge and insight of students				√
		Support given to students' self-reliance exercises			√	
		Increasing student interest in learning				√
		<b>Amount</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>24</b>
<b>Total Number</b>			<b>30</b>			
<b><math>P = \sum xi / \sum xj \times 100</math></b>			<b>93,75%</b>			

**CONCLUSION**

Referring to the results of the author's research conducted for this paper, it is concluded that the EMT created using the Canva program and Heyzine Flipbook is feasible and suitable for use as a historical learning medium. The presence of EMT learning media will give rise to engaging history education, refuting the justification for dull history education. Through navigating the given time portals, students will become more active and interactive. Students have the option to participate directly in independent learning, allowing "two-way" learning to be adequately fulfilled. The inclusion of EMT also prevents student boredom in online learning, since students are able to learn while playing with "time maps" in a history learning resource. The EMT learning media researched with the

DDD-E development model was able to assess the applicability of the media to be deployed, based on a feasibility study conducted on learning in the history of Indonesian independence course at the Department of History Education, Syiah Kuala University.

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