Developing online learning guidebook for junior high school level in Kendari City

Darnawati¹, Jamiludin², Mursidin³, La Ill⁴
¹,²,³Department of History Education, Universitas Halu Oleo, Indonesia
⁴Department of Primary School Teacher Education, Universitas Halu Oleo, Indonesia

ABSTRACT
This research aimed to develop online learning guidebook for junior high school level. The method used in this research was research and development in terms of 4-D model development which consists of four main stages: Define, Design, Develop, and Disseminate. The informants were study consisted of 2 expert informants and 17 junior high school teachers in Kendari City, Southeast Sulawesi, Indonesia. This type of research data was descriptive qualitative. The data collected were in the form of suggestions and responses put forward by the informants. This information was collected and summarized to improve the learning products developed. The results showed that the developed online learning guidebook has met the appropriate criteria in the media and language aspects by the respective experts. Besides, Teachers find that this guidebook is very interesting and useful as a guide in online learning, especially during the current pandemic. Furthermore, the developed guide book fosters curiosity of teachers to find out the use of applications in the book, and makes teachers think creatively in making learning media. The online learning guidebook is advantaged for the teachers to provide interesting learning media and material for students especially in this pandemic era.

Key words: Guidebook, Junior high school, Online learning, Pandemic era

This is an open access article under the CC BY-SA license.

INTRODUCTION
Severe Acute Respiratory Syndrome Corona Virus Disease 19 (SARS-CoV-19) or Covid-19 is the name of a now endemic disease in our beloved homeland and all parts of the world [1]. Covid-19 has graced the country's print media headlines and has become the headline of news on our national television stations. This epidemic spread massively and sporadically, leaving traces of impact in every line of life of this nation. The high level of spread and severity of covid-19 prompted the world health agency WHO to designate the Covid-19 Outbreak as a Pandemic on March 12, 2020. The extraordinary conditions in our homeland due to covid-19 forced President to set Covid-19 through a Presidential Decree concerning the Determination of Non-Natural Disaster for the Spread of Corona Virus Disease 2019 (Covid-19) as a National Disaster in 2020. The status of this emergency is very dependent on the two leading indicators mentioned in the presidential decree. First, the spread of the SARS-CoV-19 virus, which is still occurring and causing casualties, property losses, the expansion of the affected area's coverage, and implications for socio-economic aspects.
This pandemic mass forces us to adapt quickly, prompting us to modify old habits no longer relevant to the pandemic situation. Various ways and methods are applied to continue carrying out productive activities to survive amid these conditions. The new normal policies promoted by the Government have also been implemented in all things, be it social, economic, and diversity, which also changes existing policies, including our world of education.

The process of learning and teaching activities must always be increased in effectiveness and efficiency; this improves the quality of education itself. The learning process must be capable of helping students to become people facing the growth of the times [2]. Therefore, to increase the effectiveness of learning without taking up a lot of time, a teacher must be smart in choosing what methods to use so that students can quickly understand what they are saying. It is concluded that the activity is said to be effective if the activity can be completed at the right time and achieve the desired goals. Learning effectiveness is one of the standards for the quality of education that is measured by the achievement of learning objectives [3]. Besides, the effectiveness of learning can be seen from the interaction between students and between students and teachers in learning, student responses to learning, and students' mastery of concepts.

Since March 2020, the Indonesian Government issued a policy for implementing the teaching and learning process with an online system [4]. The learning system is carried out without face-to-face but is carried out using a distance learning system [4], [5]. The change in the teaching paradigm that was initially carried out in the classroom, through face-to-face between teachers and students, which later turned into online teaching through learning application media [6], cannot be implemented quickly. There are many variances of problems that hinder learning effectiveness with online methods, including: 1) Limited mastery of technology by teachers [7] and students in Indonesia limits them in using online media; 2) Inadequate supporting facilities and infrastructure for information technology; 3) Limited internet access; and 4) Ineffective provision of the Budget [8].

Online learning is carried out remotely through the media in the form of the internet and supporting tools such as smartphones, laptops/computers. Online learning can make students learn independently, and their motivation increases [9]. Online learning can be done by combining learning resources such as documents, videos, images, and audio [10]. Suppose the teacher can design the learning media as attractive as possible by combining these learning resources. In that case, it is hoped that it can attract students' interest in learning to achieve learning objectives.

There are several advantages and disadvantages of online learning, namely the flexibility of time and place to study. For example, learning can be done anywhere by utilizing the internet network both at home and. The time can be adjusted, for example, morning, afternoon, evening, or night. Besides, it can overcome distance problems. For instance, students do not have to go to school to study [11], [12]. In addition, the weaknesses of students' online learning are not well supervised during the online learning process, lack of motivation [13], [14], the weak internet signal, the high cost of data packages, and students' understanding are challenges for online learning.

Online learning process technically experiences many obstacles [15] during pandemic COVID-19 at the level of primary, secondary, and upper education [16]. Students from families who do not have internet access or even do not have cellphones will miss learning when learning assignments are delivered via the WhatsApp application or others. In addition, another impact felt by students from learning from home is too much learning load. At the same time, students are required to observe and understand the subject matter themselves quickly. Even if given the space to ask the teacher via the WhatsApp application message, it is felt that it is not enough time. And, most easily observed by students' parents, learning to teach from home also makes students easily bored because they cannot interact directly with teachers and their friends. Their parents seemed to oppose online learning and even condemn it [17].

We must admit that the implementation of online learning has not been carried out effectively. The problems previously mentioned above also haunt the execution of online learning in our area of Southeast Sulawesi. It also needs to be acknowledged that the online education that we are currently carrying out still seems to be carried out in a hurry, without adequate school preparation. It purely relies on the individual teacher's ability to explore good online learning media carrying out their teaching assignments. In our opinion, this condition is a significant problem to be resolved for the implementation of a good knowledge transfer.

The face-to-face learning method that has been carried out so far is the result of continuous experience and learning, experiences regarding how to develop learning methods that are interesting and fun for students in transferring knowledge from teachers to students. This is what we think is missing in the implementation of online learning. Limited knowledge and access to teachers' information, especially in elementary and middle schools, to online learning media and weak mastery of learning application technology, are weaknesses that occur at this time. The existence of a guideline for implementing online learning is needed in our midst.
The policy of shifting the School Operational Cost Fund allocation that is now being carried out by the Indonesian Government shows that this online learning policy has the full support of the Indonesian Government [18]. This condition should encourage us to improve the stages of implementing online learning that we have now. Along with the times, especially in supporting the Government’s plan to enter the Industrial Revolution 4.0, this online learning process may continue after the pandemic. We must respond to this change wisely and require all of us education stakeholders to prepare ourselves so that the mastery of educational technology media can be used optimally.

Zhafira, Ertika, and Chairiyanto [19] found that out of 165 students of the Faculty of Economics, Teuku Umar University who are classified as millennials based on their age, it is more convenient to use the WhatsApp application and google classroom to use in this online learning model. Fitriyani, Fauzi, and Sari [20] revealed that the results of student motivation to learn during the pandemic were very good. The eight indicators of learning motivation, namely concentration, curiosity, enthusiasm, independence, readiness, enthusiasm or encouragement, never giving up, and self-confidence, showed an average percentage score of 80.27%.

Based on previous research, what distinguishes this research from previous research is that the researcher tries to create an online learning guide for junior high schools. Researchers see that several universities already have online learning guides. Meanwhile, schools do not have online learning guides. Therefore, researchers hope that with online learning guides for junior high schools, teachers and students are motivated to carry out learning and teaching processes during the Covid-19 pandemic.

The researchers will do to support the government’s plan to hold online learning, namely by making online learning guides for junior high schools that have not been provided by schools. The objectives of completing this online learning guide are: 1) To facilitate teachers in the learning process; 2) Make it easier for students to receive the material and assignments given by the teacher; 3) Make it easy for teachers and students to use online learning media; 4) Help teachers choose the learning media used.

2. RESEARCH METHOD

Research and development design was employed in this study. In research and development methods, there are several types of models. The model of this study was a 4-D model. The 4-D (Four D) development model is a learning device development model [21]. The 4-D development model consists of 4 main stages: Define, Design, Develop, and Disseminate. This method and model were chosen because it aims to develop learning tools. Therefore, in this research, the researchers developed a product in an online learning guide book.

The informants in this study consisted of: 1) Expert Informants are groups of experts who are competent in their fields: one Media Experts and one Language Experts to determine the quality of the learning products being developed; 2) 17 Teachers of Kendari City Junior High School, as users of the learning products developed. The instrument used in the development of this online learning guide book was a research questionnaire. This questionnaire contains responses from informants, namely media experts, language experts, and lecturers as users. This is intended to determine the product's quality and effectiveness, which can be used as a learning medium or facility.

Data were collected by distributing the instrument to several informants. The instrument was designed to know the quality, effectiveness, and weaknesses of the developed learning design, both from the aspects of the method, media, aspects of the material's depth, aspects of learning, and students' use. Instruments for media experts are used to obtain data on visual and other technical aspects. Instruments for language experts and teachers were used to obtain data on aspects of learning and aspects of content, methods, and media.

This type of research data was descriptive qualitative data. The data collected were in the form of suggestions and responses put forward by the informants. This information was collected and summarized to improve the learning products developed. The data was then converted into the quantitative form using scores to be given categories for each aspect studied. This category was a reference for the product's appropriateness developed to be used as a medium or teacher and student learning facility.

3. RESULTS AND DISCUSSION

The result of this research is a product in the form of an online learning guide book for junior high school level in Kendari City, Southeast Sulawesi, Indonesia. The resulting guidebook will be used to: 1) Facilitate teachers in the learning process; 2) Make it easier for students to receive the material and assignments given by the teacher; 3) Make it easy for teachers and students to use online learning media; 4) Help teachers choose the learning media used. This research is a Research and Development (R&D) type of
research with a 4-D development model (Four D-Models) with 4 stages [21]. These stages consist of the
stage of defining, designing, developing, and disseminating [22]. The following is an explanation of the data
on the results of media development for each stage:

3.1. Defining stage
This defining stage includes facts and a set of needs in online learning at the junior high school
level. In the defining stage, it is divided into several steps. The more detailed explanation of the steps in the
defining stage is as follows:

3.1.1. Initial analysis
The preliminary analysis of this research is to find and determine the fundamental problems faced in
online learning. In this case, the assessment covers the problems faced by teachers and students during the
online learning process, so a solution is needed that is appropriate to the problems at hand. At the analysis
stage of this study, researchers made observations at SMPN 5 Kendari to obtain the necessary information.
Here are some of the results of classroom observations and interviews with the teacher:
a. Teachers and students did not have online learning guide books.
b. The application used for the online learning process is WhatsApp.
c. Teachers and students were not given rules during the implementation of online learning.
d. Presentation of material delivered by the teacher sometimes does not attract the attention of students.
   The teacher explains the material through a virtual meeting. Then, do the tasks that are in the book.
e. Not all teachers used learning media during online learning.
f. The online learning process emphasized teacher-centered; that is, the teacher only explained through the
   lecture method in class and gave assignments.

3.1.2. Student analysis
Student analysis aims to determine student characteristics in order to assist in the process of making
online learning guidebook. Because of one possible aim is to ask the instructor if they need to feel relaxed
and confident when the teacher approaches the students, it becomes very important for getting know the
students’ needs and characteristics. Based on the results of student observations, the characteristics of
students at SMPN (Junior High School) 5 Kendari are less active in online learning. Some students are not
enthusiastic about participating in online learning activities because of internet signal. This result was in line
with Bahri and Lestari [23], Yulia [24] that showed low of internet was the limitations during online learning.
Besides, the students do not focus on the material presented by the teacher. They prefer to look directly at the
teacher and friends during the learning process. Every 15 minutes, the teacher explains, students have started
to pay attention and are busy looking at each other's smartphones without being noticed by the teacher.
However, students tend to actively use gadgets in the form of smartphones or laptops to watch videos. From
this description, it can be said that students’ interest in learning is still lacking, but if the teacher provides
learning media in the form of video, students still pay more attention.

   Based on the description above, it is necessary to develop an online learning guide book. The
   contents of this guidebook provide stages of online learning, as well as various alternative applications that
   teachers can use to foster student interest in learning.

3.1.3. Concept analysis
Concept analysis identifies the main concepts in the guidebook, systematically arranges and details
the relevant concepts, and links each concept to other relevant concepts to form a complete guidebook.

3.1.4. Preparation of research instruments
The data collection instruments were in the form of teacher response questionnaires to manuals and
validation assessment sheets of media experts and language experts.

3.2. Designing stage
This stage is the stage of designing an initial draft to make online learning guidebook. At this stage,
the researcher designed a draft guidebook that contained the preparation, implementation, and assessment of
learning outcomes, the stages of operating the learning application, screenshot images of these stages, and the
advantages and disadvantages of the application. The manual is then validated by a media expert validator
and a linguist validator.
3.2.1. Application selection
The applications used in the product design of online learning guidebooks are selected based on applications that are easy to use by teachers and students and are free to download. Besides, teachers commonly use some of these applications, but not all features of this application are known to be used by teachers. Some of them are still new to teachers, such as applications for making learning videos.

3.2.2. Early book design
a. Book size and material
The book uses A-4 paper, with a size of 10 cm x 13 cm. The book is made not too thick so that young people are under everywhere. In the end, there is also the author's identity. Book material is made with thicker paper than usual so that it is not easily torn and damaged.

b. Book covers
The book covers are made with attractive pictures according to online learning themes and harmonious color compositions. The picture of the teacher teaching in front of the laptop, as well as the image of the smartphone, is adjusted to the picture during online learning.

c. The contents of the book.
At this stage, the guidebook content is arranged. The book contents are obtained from various sources, screenshots of the stages of using the application, and made into a guidebook. Some of the content contained in the book includes preparation, implementation, and assessment of online learning outcomes, virtual classes (Microsoft Office 365 and Google Classrooms), audio/video conferences (Zoom and Google Meet), multimedia teaching materials (Screencast O Matic, and Canva), Social Media (WhatsApp, and Instagram), Quiz or Test (Kahoot and Google Form).

3.3. Developing stage
The development stage consists of assessing the media expert validator and the linguist expert validator, as well as the addition of learning applications. The validated draft and has gone through the revision stage were presented to teachers at SMPN 5 Kendari as research. Furthermore, the teacher provides suggestions for making online learning guidebooks.

3.3.1. Media expert validation
All draft manuals before being introduced and submitted to teachers in schools must first be validated. Validation is carried out by media expert validators (lecturers). This validation aims to determine the feasibility of the guidebook to be used. Table 1 is a description of the results of media validation.

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Components</th>
<th>Component Indicators</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graphic feasibility</td>
<td>Book size</td>
<td>Book physical size</td>
<td>Good</td>
</tr>
<tr>
<td></td>
<td>Book cover design</td>
<td>Book cover layout</td>
<td>Very Good</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The letters used are attractive and easy to read</td>
<td>Very Good</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Book cover illustration</td>
<td>Very Good</td>
</tr>
<tr>
<td></td>
<td>Book content design</td>
<td>Layout consistency</td>
<td>Good</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Harmonious layout elements</td>
<td>Good</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Complete layout elements</td>
<td>Good</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Layout speeds understanding</td>
<td>Good</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Typography of the book content is simple</td>
<td>Very Good</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Typography is easy to read</td>
<td>Good</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The typography of the book makes it easy to understand</td>
<td>Very Good</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Content illustration</td>
<td>Good</td>
</tr>
</tbody>
</table>

Source: BSNP [25]

Based on the table above, it can be concluded that the average category of media expert validation is good. Notes from the media validation team, namely: this manual is designed to pay attention to the principles of manual writing, how to write, the pictures are directly from the application screenshots, and the use of simple language, thus motivating teachers and students to use them. One of the distinctive aspects of this book is that it does not only contain stages but also includes colorful pictures. So that it gives the initial impression to the reader that it is easy to read the book. A good initial impression will certainly generate motivation to read and even learn.
3.3.2 Validation of language experts

Based on the Table 2, it can be concluded that the average linguist validation category is Very Good. Note the linguist validator, namely: using the technique of approaching teachers' language and students that are easier to understand. Teachers and students can understand the meaning contained in the book.

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Components</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Straightforward</td>
<td>The accuracy of sentence structure</td>
<td>Good</td>
</tr>
<tr>
<td></td>
<td>The effectiveness of sentences</td>
<td>Very Good</td>
</tr>
<tr>
<td></td>
<td>Rigor of the term</td>
<td>Very Good</td>
</tr>
<tr>
<td>Communicative</td>
<td>Understanding of messages or information</td>
<td>Very Good</td>
</tr>
<tr>
<td>Dialogue and interactive</td>
<td>Ability to motivate students</td>
<td>Very Good</td>
</tr>
<tr>
<td>Suitability with the development of students</td>
<td>Ability to encourage critical thinking</td>
<td>Good</td>
</tr>
<tr>
<td>Suitability with teacher</td>
<td>Suitability with the intellectual development of students</td>
<td>Very Good</td>
</tr>
<tr>
<td>development</td>
<td>Conformity with the level of emotional development of students</td>
<td>Good</td>
</tr>
<tr>
<td>Compliance with language rules</td>
<td>Conformity with the level of teacher emotional development</td>
<td>Good</td>
</tr>
<tr>
<td>Use of the term</td>
<td>Language accuracy</td>
<td>Good</td>
</tr>
<tr>
<td></td>
<td>Spelling Accuracy</td>
<td>Very Good</td>
</tr>
</tbody>
</table>

Source: BSNP [25]

After the validation stage, the researcher held outreach with several teachers at SMPN 5 Kendari to introduce online learning guide books. Since this research was during the COVID-19 pandemic, researchers and teachers still adhere to health protocols such as wearing masks and maintaining distance.

This outreach aims to introduce a draft online learning guide and ask teachers for suggestions and comments regarding the draft book. After presenting the material and a question and answer session, the teachers filled out a questionnaire via the given Google form link. The results of this socialization are displayed in Figure 1 and Figure 2.

Figure 1. The percentage of students that have online learning guidebook

Figure 2. The result of students’ desire to have learning guidebook

Based on the Figure 1 and Figure 2, it can be concluded that 85% of teachers do not have online learning guide books. Local governments and schools do not provide online learning manuals. During the learning process, teachers are required to teach online from school. Most students study from home, while students who do not have facilities such as smartphones and the internet can study at school. The teachers send materials and assignments via the WhatsApp application. Figure 2 explains that 100% of teachers want to have an online learning guide. Based on an interview with one of the teachers, a guidebook like the researcher created is essential and useful for teachers and students in online learning. As professional teachers, teachers need to take advantage of various kinds of learning applications that can help in teaching. Besides that, the applications offered in the guidebook aim to attract students' attention to learn.

Figure 3 explains that 100% of teachers answered that the book material was presented attractively so that the meaning's integrity was well preserved. The teachers also think that using the application and accompanied by pictures is beneficial for learning to use the application. Illustration of material, both text and images according to the reader's age development level and able to clarify the material/content. Figure 4 explains that 100% of teachers think that book illustrations to clarify the material do not contain negative elements. The book does not contain elements of pornography, an ideology of extremism, radicalism, racial
violence, gender bias, and does not contain other storage values. So, this book deserves to be given to schools. This book focuses on providing information on online learning guides.

Figure 3. The performance of the book’s material

Figure 4. The illustration of the online learning guidebook

Figure 5 explains that 100% of teachers think that the presentation of material in books can stimulate critical, creative, and innovative thinking. This fosters a deep sense of curiosity for readers to learn. Some of the learning applications offered in the book are new to them, such as Screencast O Matic, Canva, Microsoft Office 365, and Kahoot. So, the teachers feel challenged to learn it. Figure 6 shows that 100% of teachers think that the presentation of the material matches readers’ needs for online learning. This can be seen from this book's contents, which gives readers a choice to determine the application according to user needs. For example, for a class that wants to have a virtual meeting, the book explains the Zoom application and google meet. Likewise, another example, if the teacher wants to do an exam. In the book, teachers are given the choice of using the Kahoot application and Google Form. If the teacher wants to make an exam with educational game elements, Kahoot can be used. Besides, 100% of teachers think that book size, font size, font selection, and material are in accordance with the age development level. This is very important so that readers can easily read the book's contents and be interested in reading the book. Besides that, the book's contents also clarify the message that is to be conveyed to the readers.

Figure 5. The presentation of the material

Figure 6. The presentation of the material matches readers’ needs

4. Disseminating stage

The disseminate stage is the dissemination stage and is the final stage of this research and development stage. At this stage the researcher registers the guidebook ISBN to the publishing house. Furthermore, the researcher disseminated it at SMPN 5 Kendari and followed by all junior high school in Kendari City.

The paradigm shift (as for some) has pathways to provide a more versatile and individual approach, concentrating on the learning process, and not the teaching portion. This enables students to train themselves for citizenship and an open way for them to learn in their life, which inevitably requires new methods of education and learning, by means of a more demand-focused approach and not the bid. In order to potentially help and have the ability to promote better ways of coping with reporting issues, the implementation of electronic technology will simultaneously personalize learning and increase a number of students. Consequently, distance education (DE) is increasingly incorporated into the teaching/learning systems.
The impact of COVID

regardless of their theory and purpose, and is regarded here as education funded by ICT, which means that it is digital dependent on and theoretically not constrained by time and space.

We can classify DE as a structured education method, centered on a formal institution, in which a study group must not be co-located and supports interactive systems of communication that link learners, learning tools and facilitators. As such, DE is seen as a mechanism where student can acquire the information needed to consolidate their own knowledge from different sources and alternative ways, in which the assistant can help the individual learning process by choosing, arranging and guiding it – taking the active and leadership role to the learner [26]. Therefore, the researcher thought that there should be a solution to increase teaching/learning systems in digital and interactive communication where students can easily access the material. The developed an online learning guidebook has become as a solution to provide better knowledge for teachers and students to go through the teaching and learning process in this pandemic era.

4. CONCLUSION

The developed online learning guidebook has met the appropriate criteria in the media and language aspects by the respective experts. Besides, teachers prove that this guidebook is very interesting and useful as a guide in online learning, especially during the current pandemic. Furthermore, the developed guide book fosters the curiosity of teachers to find out the use of applications in the book, and makes teachers think creatively in making learning media.

ACKNOWLEDGEMENTS

The author would like to thank the Chancellor of Halu Oleo University for giving the opportunity to the team of proposers for Internal Basic Research to conduct this research, as well as providing internal grants through the Halu Oleo University Research and Community Service Institute. Also, to all the parties that have given support and suggestion so the guidebook has been developed as an online guidebook especially for Junior High School Level in Kendari City.

REFERENCES


