Development of an Interactive Ebook to Improve Cultural Literacy and Citizenship in Class VIII Junior High School Students

Titik Haryati[1], Oktaviani Adhi Suciptaningsih[2(*)], Radeni Sukma Indra Dewi[3], Novianto Adhi Sucipta[4]

[1]Universitas PGRI Semarang, Semarang, Indonesia
[2,3]Universitas Negeri Malang, Malang, Indonesia
[4]CLC SMPT Lumadan Beaufort, Sabah, Malaysia

Received: : October 16, 2023 Revised: : November 30, 2023 Accepted: : December 26, 2023	**Abstract** Cultural and civic literacy is one of the important literacies for junior high school students to have. The aim of this research is to develop an interactive ebook that can increase cultural and civic literacy in class VIII students. The research method uses the Richey and Klein model, namely Research, Design, Production and Evaluation. The participants in this research consisted of seven students and one class VIII teacher at CLC SMPT Lumadan Beaufort, Sabah, Malaysia. The data analysis technique uses quantitative descriptive analysis techniques. The research results show that based on the results of the media validator and ebook material validator it is very valid to be used as a learning medium. Based on the results of the pretest and posttest, there was an increase in students' cultural and civic literacy results. This proves that the interactive ebook created is effective and efficient. Effective because it can increase cultural literacy and citizenship in class VIII students significantly and efficiently because it does not require a long time in the improvement process, namely within one month after using the product in classroom learning.
Keywords:	interactive ebooks; cultural literacy and citizenship, junior high school students
(*) Corresponding Author:	oktaviani.suciptaningsih.pasca@um.ac.id

INTRODUCTION

The Indonesian government, through the Directorate General of Primary and Secondary Education, Ministry of Education and Culture, in 2016 launched the "Gerakan Literasi Sekolah" as a participatory effort involving school residents including students, teachers, principals, education staff, school supervisors, school committees, parents/ student guardians, academics, publishers, mass media, society and stakeholders under the coordination of the Directorate General of Primary and Secondary Education, Ministry of Education and Culture, to make schools a place of learning so that its citizens can remain literate throughout life. This movement aims to develop the character of students so that they become literate people throughout their lives through the literacy ecosystem that is being built (Wandasari, 2017). A literate ecosystem has the following characteristics: fun and child-friendly, so that it can foster the enthusiasm of its citizens for learning; all citizens show empathy, care, and respect for each other; foster a spirit of curiosity and love of knowledge; enable its citizens to be able to communicate and contribute to their social

environment and accommodate the participation of all residents and the school's external environment.

The school literacy movement was developed based on the "Nine Nawacita" priorities related to the duties and functions of the Ministry of Education and Culture, especially "Nawacita" numbers 5, 6, 8 and 9, namely improving the quality of life of Indonesian people and society; increasing people's productivity and competitiveness in international markets so that the Indonesian nation can progress and rise together with other Asian nations; carry out a national character revolution and strengthen diversity and strengthen Indonesia's social restoration. The four "Nawacita" points are related to the literacy component which forms quality, productive and competitive human resources, character, and nationalism. The target of the "Gerakan Literasi Sekolah" is the school ecosystem at the primary and secondary education levels. In the "Gerakan Literasi Sekolah", students are expected to have several literacies, namely reading, and writing literacy; numeracy literacy; scientific literacy; digital literacy; financial literacy; and cultural and civic literacy (Dirjen Dikdasmen Kemdikbud, 2018).

Reading and writing literacy are the ability to read, understand and comprehend and use written language. Numerical literacy is the ability to use numbers and other symbols to understand and express quantitative relationships. Scientific literacy is the ability to use scientific knowledge and principles to understand the environment and test hypotheses. Digital literacy is the ability to use and create technology-based content, including finding and sharing information, answering questions, interacting with other people and computer programming. Financial literacy is the ability to understand and apply conceptual aspects and financial matters in daily activities. Cultural and civic literacy is the ability to understand, appreciate, analyze, and apply knowledge about Indonesian culture as a national identity and the ability to understand the rights and obligations as citizens (Budiharto, et.al, 2020).

Schools should ideally be able to be at the forefront of developing a literacy culture. There are several strategies for creating a positive literacy culture in schools, including conditioning the physical environment to be literacy friendly, trying to create a social and effective environment as a model of literate communication and interaction, and making the school a literate academic environment (Beers, et.al, 2009).

All schools are required to carry out the "Gerakan Literasi Sekolah" as seen in several research (Fangestika, 2018; Ramandanu, 2019; Saraswati, et.al, 2021; Risky, et.al, 2023), including CLC SMPT Lumadan Beaufort, which is one of the Indonesian schools which is outside Indonesia, precisely located in Sabah, Malaysia. Based on the results of observations, the implementation of the literacy movement in this school has not been optimal, especially in cultural and civic literacy. This is caused by many things, one of which is because most students were born, grew and developed in Sabah, Malaysia. They don't have enough memories of Indonesia as their homeland. Based on the results of interviews with students, they said that they knew Indonesian culture from the material presented by the teacher and from stories from their parents but did not understand Indonesian culture in detail. Based on the information conveyed by the teacher, teachers have limitations in conveying Indonesian culture. The teacher only tells stories and uses pictures about Indonesian culture as a learning medium. For this reason, effective and efficient learning media are needed to equip students to have cultural and civic literacy. This is important to do because Indonesia has various ethnic groups, cultures, languages, customs, religious habits, and beliefs. To understand the diversity and responsibilities of citizens as part of a nation in the 21st century. Apart from that, cultural and civic literacy is also the main foundation for increasing global diversity in students in accordance with the "Profil Pelajar Pancasila".

One media that has the potential to increase students' creativity and understanding of learning knowledge is ebook-based learning media technology (Fathoni, et.al, 2018). Ebook stands for electronic book, namely a textbook that is converted into digital format (Suryani, et.al, 2018; Prihantoro, 2018; Us, et.al, 2019; Makdis, 2020; Sukardi, 2021). In its development, the appearance of ebooks has become more attractive because users can interact and communicate reciprocally, so they are called interactive ebooks (Suprapto, et.al, 2019). Based on the description above, this research aims to develop an interactive ebook that can increase cultural and civic literacy in class VIII students.

METHODS

Research Design

This research method uses the development model according to Richey and Klein (2009) which consists of three stages, namely design, production, and evaluation, as seen in the following picture.
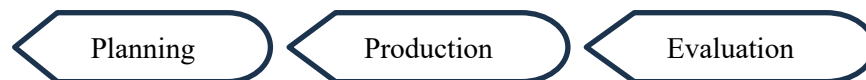

Figure 1. Richey and Klein Method

Participant

Respondents are research subjects or people who are asked to provide answers regarding perceptions and facts on a particular topic (Arikunto, 2006). Respondents involved in data collection included Basic Education lecturers, Learning Technology lecturers and CLC teachers at SMPT Lumadan Beaufort, Sabah, Malaysia as validators as well as class VIII students, as in the following picture.
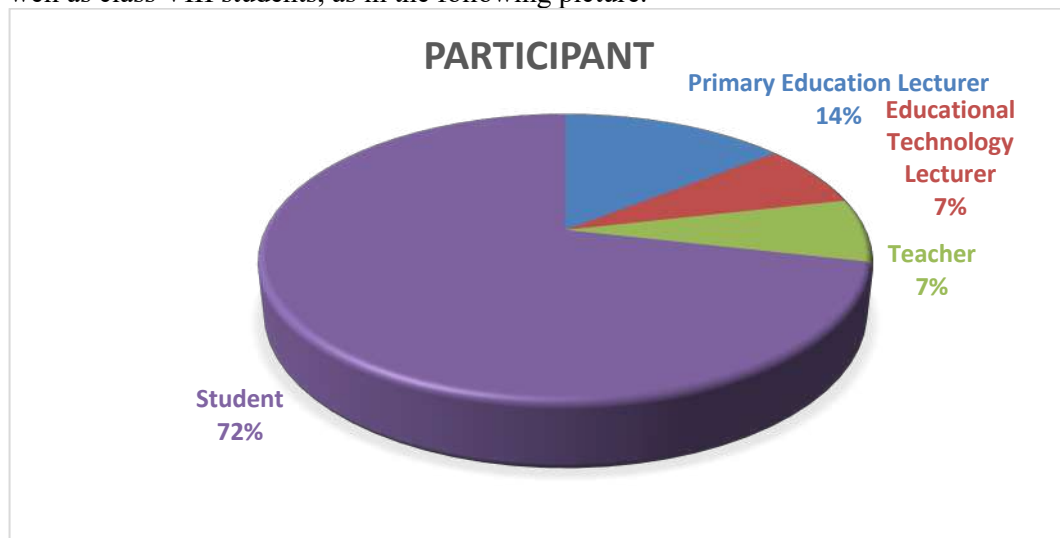

Figure 2. Participant Chart

Data Collection Technique

The data collection technique uses a questionnaire in the form of questions or written statements to respondents to obtain the desired data. This research uses a Likert scale, which is a research scale used to measure attitudes, opinions, perceptions of individuals or

groups related to social phenomena that are the object of research (Sugiyono, 2006). The development research instruments used are material expert validation instruments and media expert instruments.

1. Material Expert Instrument

   Material expert instruments are used to obtain data or results in the form of quality of material content from interactive ebooks. Material expert validation is carried out by Basic Education lecturers and teachers with a scientific background in Sociology and Anthropology Education.

2. Media Expert Instrument

   Media expert instruments are used to obtain data/results in the form of media quality from interactive ebooks. Media expert validation is carried out by Educational Technology lecturers and teachers. After validating the ebook, the data is then processed and analyzed, then revisions are made to the ebook according to criticism and suggestions by the validator.

Data Analysis Technique

The data analysis technique uses quantitative descriptive analysis techniques, which are the results of interactive ebook validity tests. The validity assessment was tested by material experts and media experts. The validation results obtained from the two experts were used to determine the validity of the interactive ebook. The validity score of the interactive ebook is calculated using the following formula:

$$(1) \quad \text{Percentage (100\%)} = \frac{\text{Number of data collection scores}}{\text{Criteria score}} \times 100\%$$

The following are the validity criteria established:

Table 1. Validity Criteria

No	Achievement Level	Criteria
1	0% - 20%	Invalid
2	21% - 40%	Less valid
3	41% - 60%	Quite valid
4	61% - 80%	Valid
5	80% - 100%	Very valid

Source: Riduwan (2011)

RESULTS & DISCUSSION

The ebook development stages consist of three stages, namely design, production, and evaluation, as seen in the following picture.

1. Planning

   This is the stage for identifying various needs in developing learning media, including objectives, knowledge and required components. The following is an identification of the need for creating an interactive ebook.

   a. Analysis of interactive ebook needs

      1) Analysis of functional requirements, namely various aspects presented in an interactive ebook, such as presenting menus/buttons to select the desired page, compiling the contents of an interactive ebook based on the achievement of Indonesian cultural and civic literacy, compiling barcodes that directly display real objects from several materials presented and page presentation.

2) Analysis of non-functional needs, namely the facilities and infrastructure used in the process of compiling an interactive ebook, such as hardware, in this case a laptop and software used, namely Canva, Pinterest, QR Code, FLIPHTML5, Play Store, etc.

b. Material analysis

Is a description of the material that will be presented in an interactive ebook that is adapted to the content of Indonesian cultural and civic literacy. The material presented in the interactive ebook includes Pancasila, Bhineka Tunggal Ika, Bendera Merah Putih, Pembukaan UUD 1945, Tari Tradisional, Rumah Adat, Baju Adat, and Menu Makanan Khas Indonesia.

c. Procedure analysis

These are the steps in running a system.

d. Flow chart

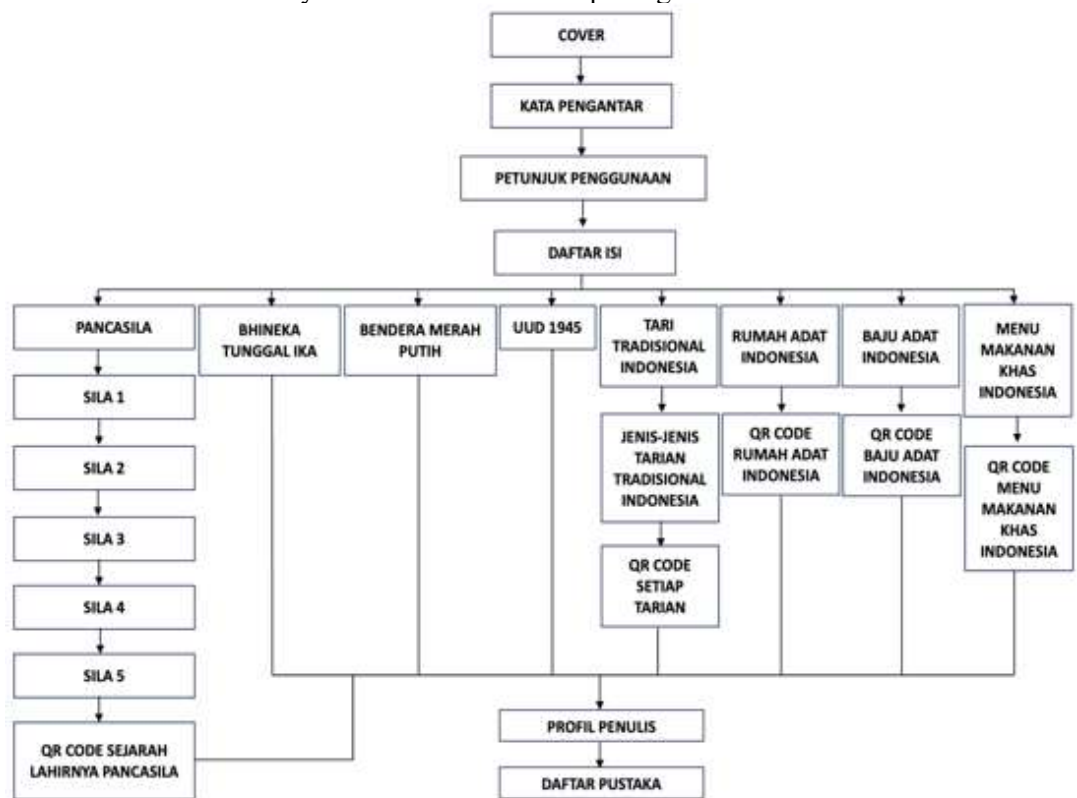Is a chart that has a systematic flow of completing an interactive ebook.

Figure 3. Flowchart Design

2. Production (Produksi)

Is the product design stage based on visual images to create designs in interactive ebooks.

3. Evaluation (Evaluasi)

This is the feasibility test stage of interactive ebooks to measure the suitability of the material and media used. The ebook suitability test is carried out using a validity test by material experts and media experts. Validity testing is an activity process to assess whether the product design created is in accordance with the media and material design which is carried out by distributing instruments in the form of questionnaires to media experts and material experts.

The result of developing an interactive ebook that can increase cultural and civic

literacy in class VIII students is an electronic version of the book that can be operated with android smartphones, computers, and laptops. According to Oxford Dictionaries, ebooks are printed books converted into electronic form that can be read using smartphones, computers, and laptops. Meanwhile, according to publisherbukudeepublish.com, ebooks are digital books that present information in the form of text, images, video, audio, and other forms of multimedia that can be opened via laptop, computer, and smartphone.

This interactive ebook is entitled " E-Book Identitas Sosial dan Budaya Indonesia" which was developed or designed using the Canva, Pinterest, QR Code, FLIPHTML5, Play Store applications. This ebook consists of 86 pages. The general functions of ebooks are (1) as a learning tool; (2) as an information medium; (3) and as promotional media. In this case, the ebook created contains the three general functions of an ebook, namely that the "Indonesian Social and Cultural Identity E-Book" functions as a learning tool that can increase cultural and civic literacy in class VIII junior high school; as a medium for information regarding Indonesian social and cultural identity; and as a medium for promoting Indonesia's social and cultural diversity.

Based on the assessment results obtained from material expert validation, the results of the assessment by validator 1 with a percentage value of 94% are categorized as "very valid" for use as learning media. Validator 2 with a percentage value of 90% is categorized as "very valid" for use as learning media. Meanwhile, the assessment results obtained from media expert validation can be seen from the assessment results by validator 1 with a percentage value of 90.84% categorized as "very valid" for use as learning media. Validator 2 with a percentage value of 92.08% is categorized as "very valid" for use as learning media.

The display of an interactive ebook that can increase cultural and civic literacy in class VIII students can be seen as followst:

1. Cover Page

   The cover page contains the ebook title, namely " E-Book Identitas Sosial dan Budaya Indonesia " and the author's name. This title serves to provide information to the reader regarding the description of the book's contents and the author's identity. The following is a display of the cover page.

Figure 4. Cover Page Display

2. Kata Pengantar

   The foreword contains a brief introduction including thanks, the purpose of making the ebook, benefits, criticism, and suggestions. The following is a display "Kata
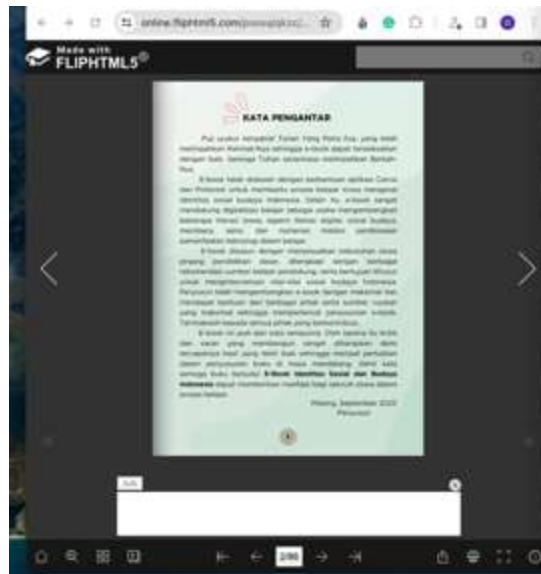
Pengantar".

Figure 5. Foreward

3. Daftar Isi
   The table of contents contains everything contained in this ebook along with the pages.
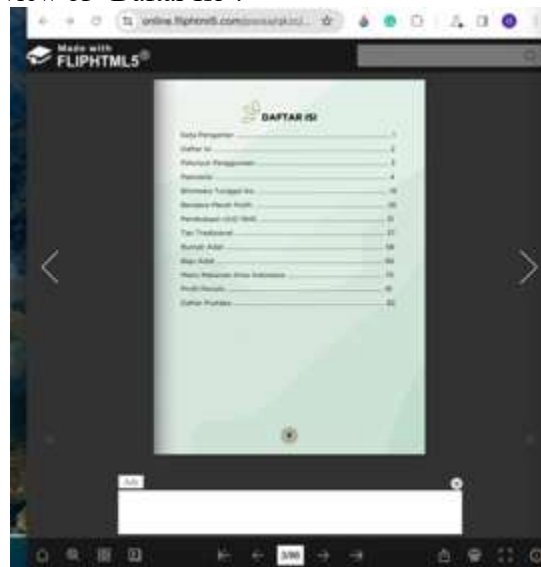   The following is a view of "Daftar Isi".

Figure 6. List of Content

4. Petunjuk Penggunaan
   The instructions for use contain information on how to use the book, namely by downloading a QR scan on the Google Play Store so you can access supporting learning resources and scanning the QR code using the application installed on your smartphone along with how to scan the QR code. The following is a view of "Petunjuk Penggunaan".

Figure 7. Instructions for Use

5. Bagian 1 Pancasila

Part 1 contains Pancasila. It discusses what Pancasila is, the five precepts and their points, the history of the birth of Pancasila and the song "Garuda Pancasila" which is presented in the form of a QR Code. Apart from that, at the end of this section there is a quiz which is presented in the form of "fun guesses" as a tool to measure students' understanding of the material studied in this section. The following is a display "Bagian 1 Pancasila".
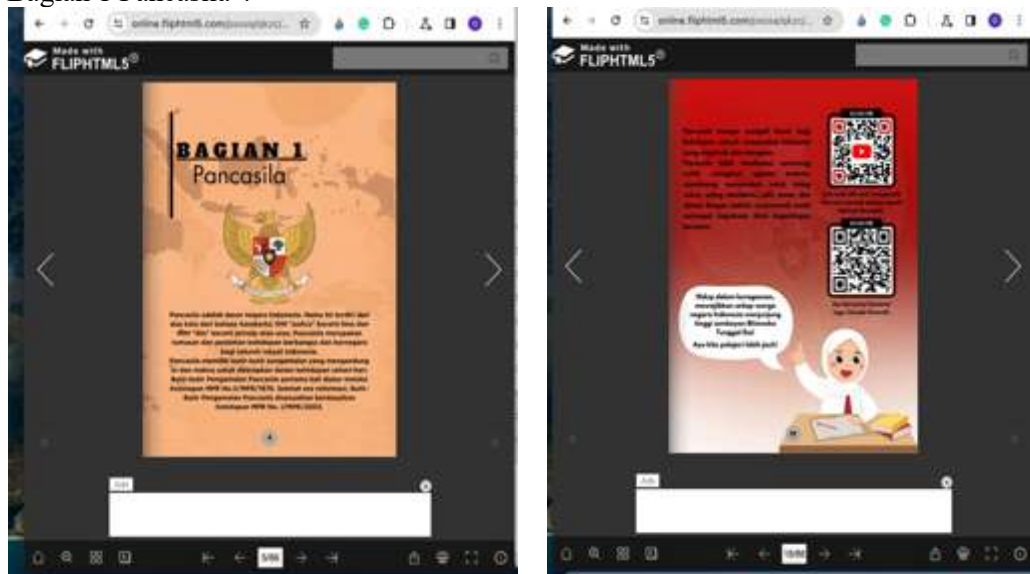

Figure 8. Bagian 1 Pancasila

6. Bagian 2 Bhinneka Tunggal Ika

Part 2 discusses Bhinneka Tunggal Ika, including the concept, brief history, principles, and implementation. At the end of this section there is also a quiz in the form of "Fun Guessing". The following is a display "Bagian 2 Bhinneka Tunggal Ika".

Figure 9. Bagian 2 Bhinneka Tunggal Ika

7. Bagian 3 Bendera Merah Putih
   Part 3 discusses the "Bendera Merah Putih". It contains the meaning of "Bendera Merah Putih", the song "Bendera Merah Putih", a brief history, and a quiz. The following is a display "Bagian 3 Bendera Merah Putih".
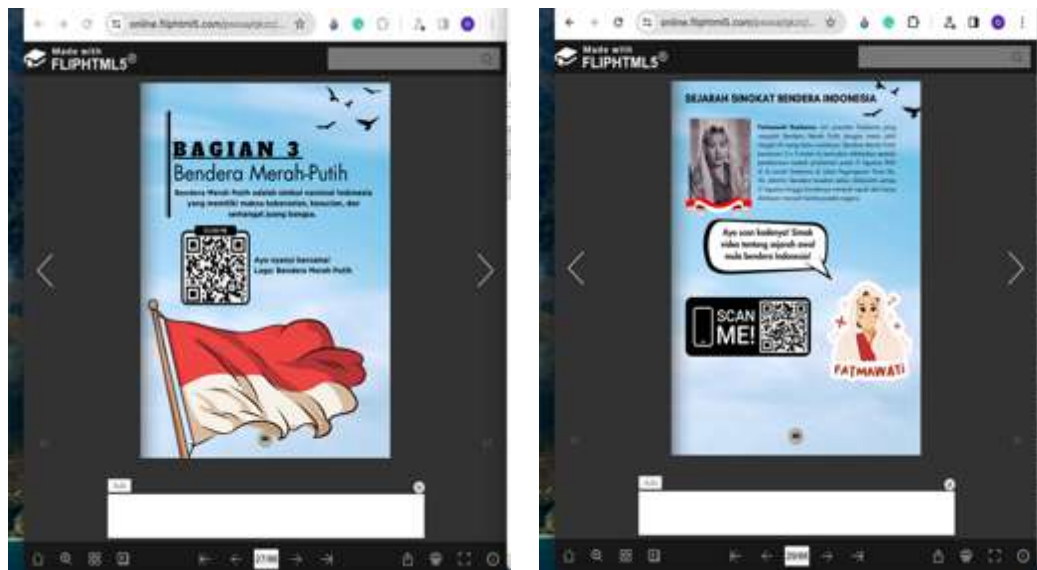

Figure 10. Bagian 3 Bendera Merah Putih

8. Bagian 4 Undang-Undang Dasar Negara Republik Indonesia
   Part 4 discusses Undang-Undang Dasar Negara Republik Indonesia, which contains the history of its formulation which is presented in narrative form and is equipped with a video on the complete history of the Undang-Undang Dasar Negara Republik Indonesia, the structure of the UUD 1945, the contents of the Preamble to the UUD 1945, and a quiz. The following is a display "Bagian 4 Undang-Undang Dasar Negara Republik Indonesia".
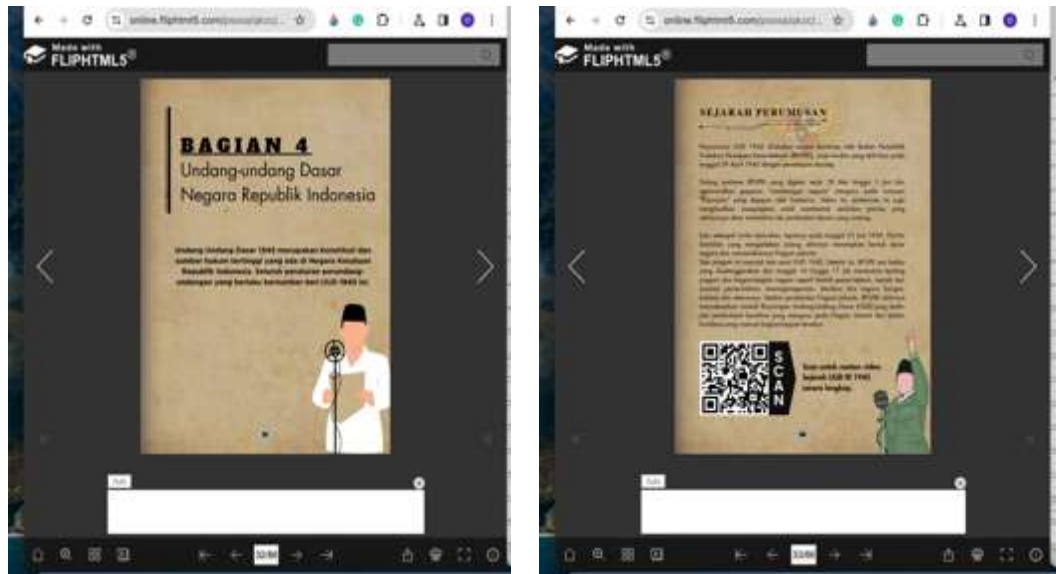
Figure 11. Bagian 4 Undang-Undang Dasar Negara Republik Indonesia

9. Bagian 5 Tari Tradisional Indonesia

   Part 5 discusses "Tari Tradisional Indonesia". It contains various types of traditional dances in Indonesia, equipped with complete videos of the movements for each dance, and quizzes. The following is a display "Bagian 5 Tari Tradisional Indonesia".
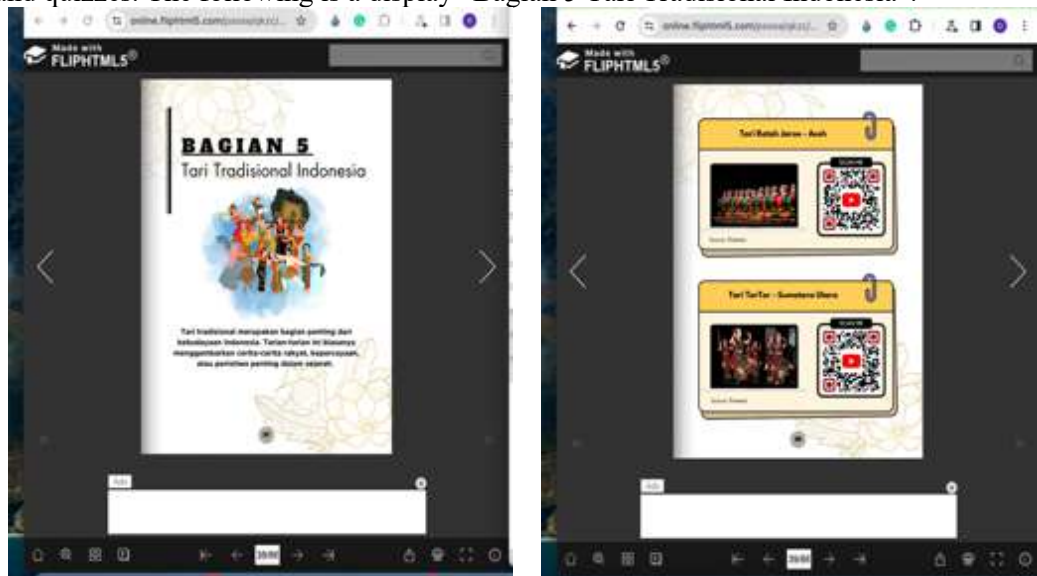

Figure 12. Bagian 5 Tari Tradisional Indonesia

10. Bagian 6 Rumah Adat Indonesia

    Part 6 discusses "Rumah Adat Indonesia", it contains various traditional houses in Indonesia and is equipped with videos of various traditional houses in Indonesia and a quiz. The following is a display "Bagian 6 Rumah Adat Indonesia".
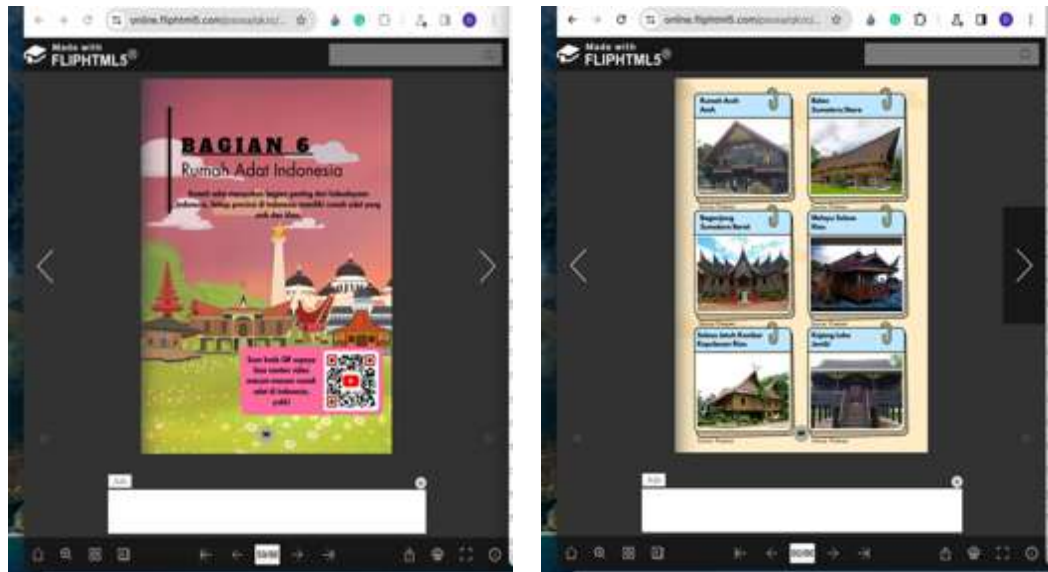
Figure 13. Bagian 6 Rumah Adat Indonesia

11. Bagian 7 Baju Adat Indonesia
    Part 7 discusses "Baju Adat Indonesia", which consists of a variety of Indonesian traditional clothes, accompanied by videos of the luxury of Indonesian traditional clothes, and a quiz. The following is a display "Bagian 7 Baju Adat Indonesia".
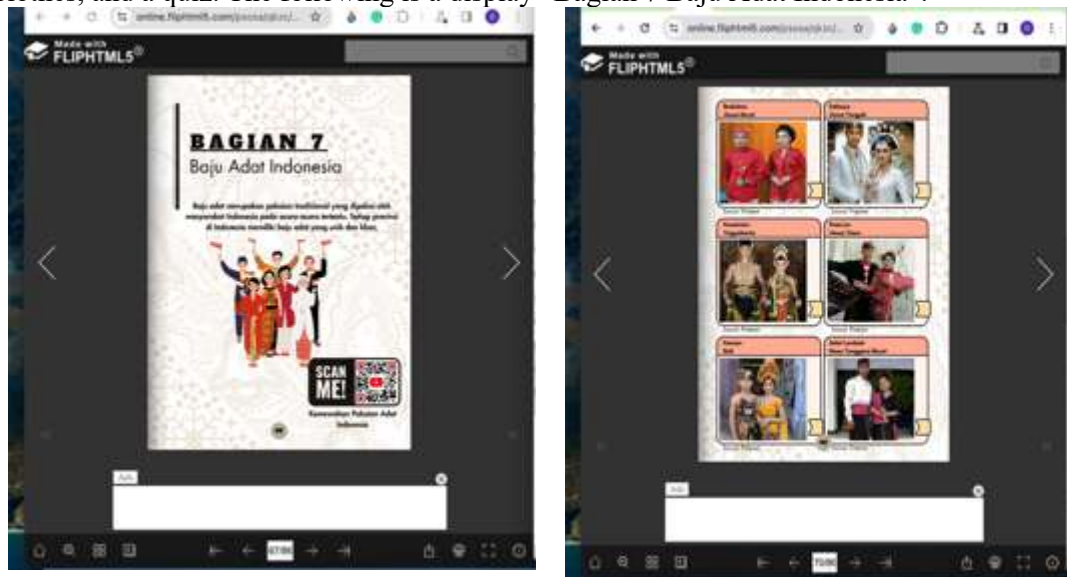

Figure 14. Bagian 7 Baju Adat Indonesia

12. Bagian 8 Menu Makanan Khas Indonesia
    Section 8 discusses "Menu Makanan Khas Indonesia", which contain various types of typical Indonesian food menus, complete with videos of typical Indonesian food menus and quizzes. The following is a display "Bagian 8 Menu Makanan Khas Indonesia".
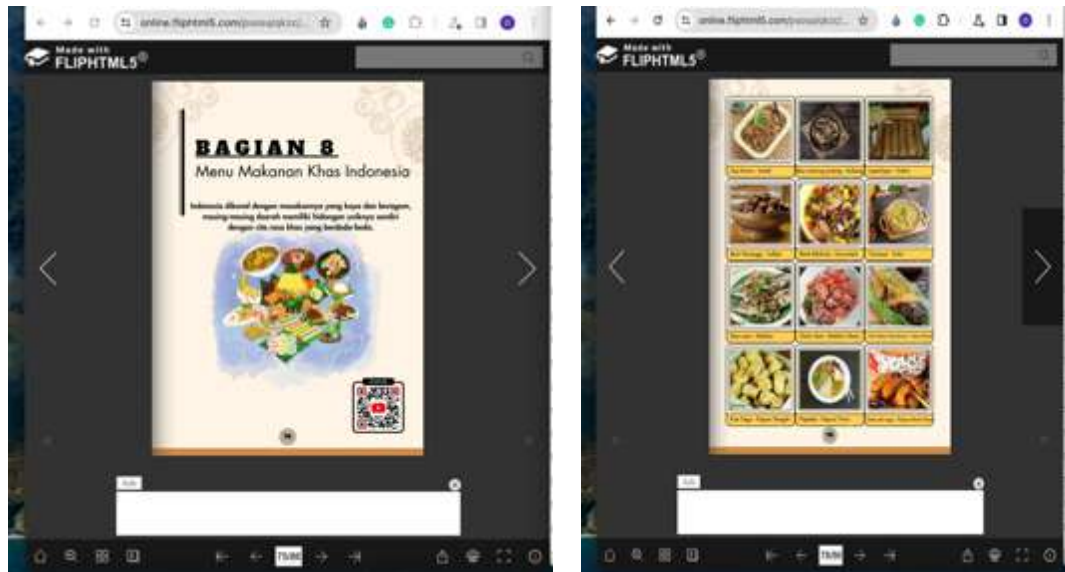
Figure 15. Bagian 8 Menu Makanan Khas Indonesia

13. Profil Penulis
    This section contains the author's profile. The following is a display "Profil Penulis".
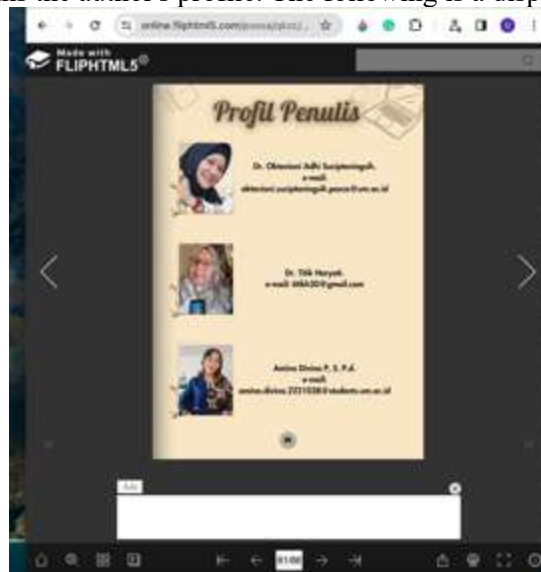

Figure 16. Profil Penulis

14. Daftar Pustaka
    Contains various references that have been used in writing this ebook. The following
    is a display "Daftar Pustaka."
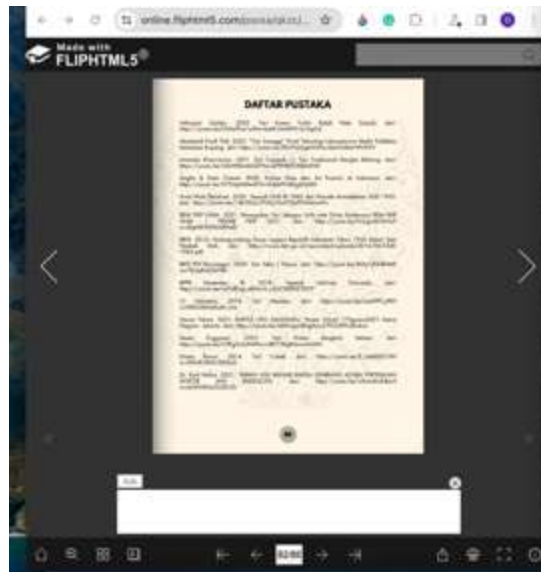
Figure 17. Daftar Pustaka

15. Back Page of the Ebook Identitas Sosial dan Budaya Indonesia
    Contains an overview of the substance of the "Ebook Identitas Sosial dan Budaya Indonesia". Here is a view of the back page "E-Book Identitas Sosial dan Budaya Indonesia".

Figure 18. Back Page "E-Book Identitas Sosial dan Budaya Indonesia"

Based on the results of trials using the "Ebook Identitas Sosial dan Budaya Indonesia" with 7 students and 1 teacher, several advantages of the ebook were obtained, including practical, easy to obtain, able to include other media, flexible and interesting. For more details, see the following graph:
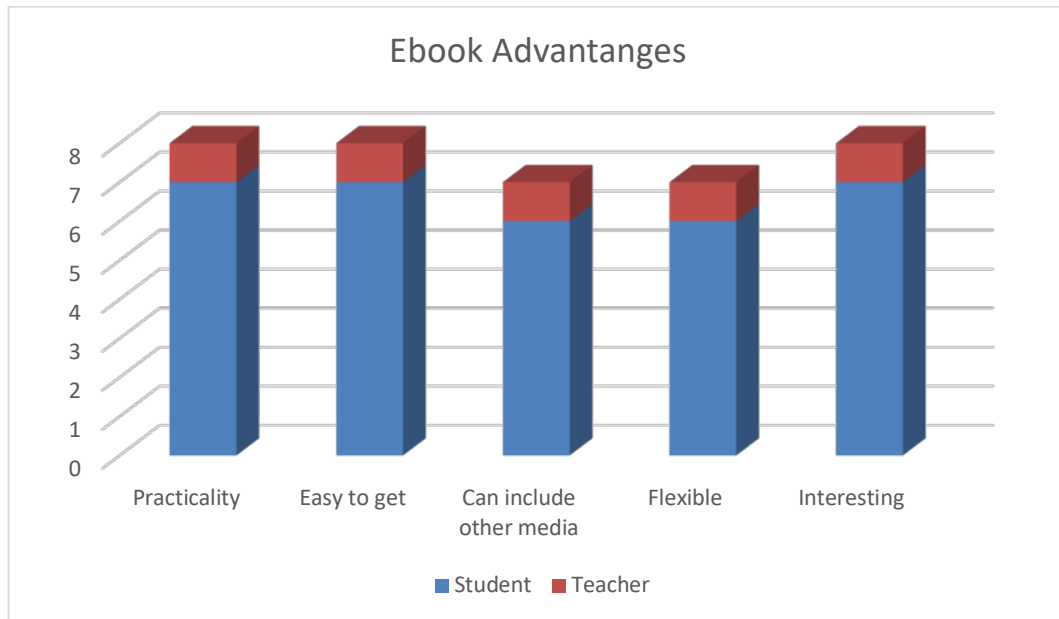
Figure 19. Ebook Advantages Graphic

Based on Figure 19, it shows that the ebook has several advantages. Apart from these advantages, there are also other advantages of ebooks, namely that ebooks can increase students' learning motivation (Mardin, et.al, 2022), make it easier for students to understand the content of the material being taught by the teacher (Santoso, et.al, 2018), and improve students' skills in learning (Santoso, et.al, 2018).

Based on the results of the pretest and posttest, it was found that the use of the "Indonesian Social and Cultural Identity E-Book" can increase cultural and civic literacy in class VIII students, as seen in the following picture:
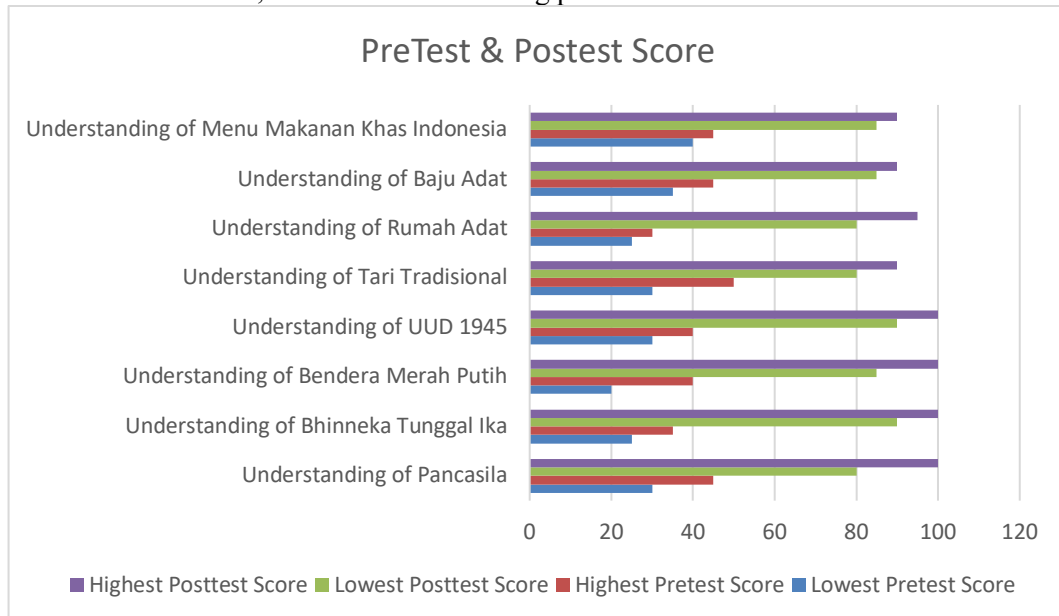

Figure 20. Pretest & Postest Score

Based on Figure 20, it shows that there is a significant increase in cultural and civic literacy after using ebooks. This is because the ebook display is practical, easy to obtain, can include

other media, is flexible and interesting, so that students can easily understand the material being studied.

CONCLUSION

Based on the research explanation above, it can be concluded that the process of developing an interactive ebook with the title "Indonesian Social and Cultural Identity E-Book" using the Richey and Klein model, namely Research, Design, Production and Evaluation, received a positive response from material experts and media experts. Based on the assessment results obtained from material expert validation, the assessment results by validators 1 and 2 with percentage values of 94% and 90% were categorized as "very valid" for use as learning media. Meanwhile, the assessment results obtained from media expert validation were seen from the assessment results by validators 1 and 2 with percentage values of 90.84% and 92.08%, which were rated as "very valid" for use as learning media. In the testing process, there are several advantages of ebooks, namely they are practical, easy to obtain, can include other media, are flexible and interesting. Based on the pretest and posttest scores, it can be concluded that there has been an increase in cultural and civic literacy in class VIII students at CLC SMPT Lumadan Beaufort.

ACKNOWLEDGEMENT

REFERENCES

Arikunto. (2006). *Prosedur penelitian suatu pendekatan praktek*. Jakarta: PT. Rineka Cipta.

Beers, C.S., Beers, J.W., Smith, J.O. (2009). *A Principal's guide to literacy instruction*, New York: Guilford Press.

Budiharto, Triyono, Suparman. (2020). Literasi sekolah sebagai upaya penciptaan masyarakat pebelaajr yang berdampak pada peningkatan kualitas pendidikan. *Seuneubok Lada: Jurnal Ilmu-ilmu Sejarah, Sosial, Budaya dan Kependidikan*, 5(1), 153-166.

Dirjen Dikdasmen Kemdikbud. (2018). *Desain induk gerakan literasi sekolah*. Jakarta: Dirjen Dikdasmen Kemdikbud.

Fangestika, D. (2018). Pelaksanaan gerakan literasi di sekolah dasar, *Jurnal Pendidikan Guru Sekolah Dasar*, 35(7), 3.501-3.508.

Fathoni, M.I., Marpanaji, E. (2018). Pengembangan e-book interaktif mata pelajaran Teknologi Informasi dan Komunikasi (TIK) untuk SMK kelas X, *Jurnal Inovasi Teknologi Pendidikan*, 5(1), 70-81. https://doi.org/10.21831/jitp.vhttps://doi.org/10.21831/jitp.v5i1.17149

Makdis, N. (2020). Penggunaan ebook pada era digital, *Al-Maktabah*, 19(1), 77-84. http://doi.org/10.15408/almaktabah.v19il.21058

Mardin, S., Ramadhan, A., & Ismail, M. (2022). The Development of an Ebook with Learning Management System to Improve Student's Metacognition Ability. EST Journal of Educational Science and Technology, 8(1), 35-43. https://doi.org/10.26858/est.v8i1.30947

Oxfordditionaries.com. (2023, 1 September). *E-book*. https://www.oxfordlearnersdictionaries.com/definition/english/e-book?q=ebook

penerbitbukudeepublish.com. (2021, 21 Juni). *Pengertian Ebook: Fungsi, Tujuan, Format, dan Cara Membuat Buku.* https://penerbitdeepublish.com/pengertian-ebook/

Prihantoro, C.R. (2018). Pengaruh e-readiness, e-learning dan e-book pada implementasi kurikulum Program Studi D3 Teknologi Mesin terhadap prestasi lulusan program diploma, Jurnal Teknologi Pendidikan, 20(2), 105-119. https://doi.org/10.21009/jtp.v20i2.8619

Ramandanu, F. (2019). Gerakan literasi sekolah (GLS) melalui pemanfaatan sudut baca kelas sebagai sarana alternatif penumbuhan minat baca siswa, *Jurnal Mimbar Ilmu*, 24(1), 10-19. https://doi.org/10.23887/mi.v24i1.17405

Richey, R.C., Klein. J.D. (2009). *Design and development research: methods, strategies and issues*, Mahwah, New Jersey: Lawrence Erlbaum Associates Publishers.

Riduwan. 2011. *Belajar Mudah Penelitian untuk Guru, Karyawan dan Peneliti Pemula*. Bandung: Alfabeta

Risky, F., Rahmayanti, P., Molinda, R., Ramadani, S., Dafit, F. (2023). Keterlaksanaan Program Literasi SD MI Muhajirin Duri, *Jurnal Insan Pendidikan dan Sosial Humaniora*, 1(3), 10-14. https://doi.org/10.59581/jipsoshum-widyakarya.v1i3.702

Santoso, T.N.B., Siswandari, Sawiji, H. (2018). The Effectiveness of eBook versus Printed in the Rural Schools in Indonesia at the Modern Learning Era. *International Journal of Educational Research Review*, 3(4), 77-84. https://doi.org/10.24331/ijere.453512

Saraswati & Sridiyatmiko, G. (2021). Implementasi gerakan literasi sekolah dalam pembentukan karakter peserta didik, *Jurnal Sosialita*, 15(1), 127-140.

Sari, S.Y., Rahim, F.R., Sundari, P.D., & Aulia, F. (2021). The Importance of e-Books in Improving Students' Skills in Physics Learning in the 21st Century: a Literature Review. *Journal of Physics: Conference Series*, IOP Publishing, 2309, 1-8. https://doi/10.1088/1742-6596/2309/1/012061

Sukardi. (2021). Analisa minat membaca antara e-book dengan buku cetak menggunakan metode observasi pada Politeknik Tri Mitra Karya Mandiri, *Jurnal Ikraith-Ekonomika*, 4(2), 158-163. https://doi.org/10.37817/ikraith-ekonomika.v4i2.1029

Suprapto, E., Apriandi, D., Pamungkas, I.P. (2019). Pengembangan e-book interaktif berbasis animasi bagi siswa Sekolah Menengah Kejuruan, Anargya: *Jurnal Ilmiah Pendidikan Matematika*, 2(2), 124-130. https://doi.org/10.24176/.v2i2

Suryani, E., Khoiriyah, I.S.A. (2018). Pemanfaatan e-book sebagai sumber belajar mandiri bagi siswa SMA/SMK/MA, International Journal of Community Service Learning, 2(3), 177-184. https://doi.org/10.23887/ijcsl.v2i3.15422

Wandasari, Y. (2017). Implementasi Gerakan Literasi Sekolah (GLS) sebagai pembentuk pendidikan berkarakter. *Jurnal Manajemen, Kepemimpinan dan Supervisi Pendidikan*, 1(1), 325-343. https://doi.org/10.31851/jmksp.v2i2.1480

Us, K.A., Mahdayeni. (2019). Penggunaan e-learning, e-book, e-journal dan sistem informasi pendidikan Islam di Universitas Sriwijaya Palembang, *Innovatio: Journal for Religious-Innovation Studies*, XIX(1), 43-64, https://doi.org/10.30631/innovatio.v19i1.81