

The Development Of Web-Based Islamic Law E-Book Library Application in Sharia Faculty UIN Sultan Maulana Hasanuddin Banten

¹M. Iman Wahyudi

¹ UIN Sultan Maulana Hasanuddin Banten

e-mail: iman.wahyudi@uinbanten.ac.id

²Eko Wahyu Wibowo

² UIN Sultan Maulana Hasanuddin

e-mail: eko.wibowo@uinbanten.ac.id

³Mustaghfiroh

³ UIN Sultan Maulana Hasanuddin

e-mail: mustaghfirohzhio06@gmail.com

⁴Wanda Tsania Muliasih

⁴ UIN Sultan Maulana Hasanuddin Banten

e-mail: wandamulia29@gmail.com

Abstract

The purpose of this study is to develop a web-based e-book library application that can be accessed through a website application platform as a digital literacy activity service so that the literacy of the academic community of the Faculty of Sharia can be accommodated properly, which focuses on a collection of digital ebooks about Islamic law, so that it can mediate the excavation of knowledge about Islamic law anytime and anywhere without being hindered by space and time that focuses on Collection of digital e-books on Islamic law. This research uses the Research Development method or also known as Research and Development (R&D), the results showed that there was an increase compared to the first validation there was an increase in the average value and criteria with a percentage value of 81%, the average score obtained was 4.05 with very good criteria compared to the initial validation which only got a percentage value of 78% of the average value obtained is 3.9

Keywords: E-book Application, Islamic Law, Website

A. INTRODUCTION

One of the supporters of the educational process that has major implications for results is literacy, in order to support educational institutions must begin to innovate to implement innovation policies in the field of information and communication technology, in order to

equalize and improve the quality of service and the quality of graduates, this occurs based on advances in the field of information and communication technology (ICT) in the world and educational trends that occur in various parts of the world, The results of research from ¹ and ² explain that integrating ICT in learning activities is a very potential thing to be held in education, and will become a trend in the second century one, as well as stated by ³ that the trends that occur in society in social life are known as digital society with high mobility characteristics.

Literacy is a habit of thought followed by the process of reading, writing, experiencing and feeling ⁴ which will give birth to a result of thinking that develops from the results of previous analysis, skills that are being hotly discussed and have begun to be implemented in the curriculum in Indonesia, these skills are four skills that must be mastered by students abbreviated to 4C, including; Critical Thinking, Creativity, Collaboration, and Communication. These skills have become a necessity in this century, these four skills are the provision of quality competitiveness resulting from an educational process.

Studies related to digital literacy and e-book libraries have been conducted by several previous researchers, Definition of literacy ⁵, Literacy is an ability in a person to write and read, along with the development of literacy itself does not only focus only on the ability to read and write The Indonesian Ministry of Education and Culture describes the types of literacy, one of which is digital literacy.

According to ⁶ digital literacy is defined as the ability to explore, and understand, and use information in a multi-source form that is very widely sourced and accessible through computer devices, while the

¹ Leman Figen Gül, "The Changing Trends in Education," *Frontiers in ICT*, 2015.

² Magdaléna Cárachová, "21ST CENTURY EDUCATION TRENDS," in *EDULEARN20 Proceedings*, vol. 1, 2020.

³ Dmytro Dzvinchuk and Iryna Ozminska, "EDUCATIONAL TRENDS OF THE XXI CENTURY," *Educational Discourse: collection of scientific papers*, no. 21(3) (2020).

⁴ Brian V Street, "The Meanings of Literacy," *Westview Press* (1999).

⁵ Harvey J. Graff, "Introduction to Historical Studies of Literacy," *Interchange* 34, no. 2 (2004).

⁶ Paul Gilster and Trish Watson, "An Excerpt from Digital Literacy," *Digital Literacy* (1997).

definition of digital literacy according to ⁷ The idea of digital literacy is information literacy related to computers, ICT, e-literacy, networks, media, and must be matched with terms that avoid the idea of "literacy" out of The context, so that the ability to manage information flows and management capabilities grows with the term "intelligence".

Improving skills can be done with digital-based interactive media, ⁸, building critical thinking through smart phone-based interactive media, ⁹ creating digital classes to build literacy and critical thinking competencies in students.

The use of e-books is one of the developments in increasing digital literacy based on research ¹⁰ The use of digital e-books during the covid 19 pandemic at Kyushu University showed a significant increase, there was an increase in total access by 846% from 2019 to 2020, and research ¹¹ showed that from the data taken in this study, as many as 237 students who were self-isolated were given an online survey and The results have a positive impact where students use digital e-books as one of their learning resources, and The results of research ¹² show that the National Digital Library application (iPusnas) has provided satisfaction to its users, and the results of research ¹³ show that members of the IAIN Kediri Library have taken advantage of e-book services by accessing from

⁷ David Bawden, "Origins and Concepts of Digital Literacy," *Digital literacies: Concepts, policies and practices* (2008).

⁸ Patni Ninghardjanti and Chairul Huda Atma Dirgatama, "Building Critical Thinking Skills Through a New Design Mobile-Based Interactive Learning Media Knowledge Framework," *International Journal of Interactive Mobile Technologies* 15, no. 17 (2021).

⁹ Siu Cheung Kong, "Developing Information Literacy and Critical Thinking Skills through Domain Knowledge Learning in Digital Classrooms: An Experience of Practicing Flipped Classroom Strategy," *Computers and Education* 78 (2014).

¹⁰ Mei Kodama et al., "Usage of E-Books During the COVID-19 Pandemic: A Case Study of Kyushu University Library, Japan," in *Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, vol. 12646 LNCS, 2021.

¹¹ Senthilkumaran Piramanayagam and Partho Pratim Seal, "Hospitality Students' Adoption of e-Books during the COVID-19 Pandemic: A Developing Country Perspective," *Library Philosophy and Practice* 2021 (2021).

¹² Abdul Gani, "Evaluasi Tingkat Kepuasan Pengguna E-Book Perpustakaan Digital Nasional (IPusnas) Dengan Menggunakan Model ISO 9126 1 Oleh ;," *Jurnal Basicedu* 2, no. 5 (2013).

¹³ Moch. Basit Aulawi, "Pemanfaatan Layanan E Book Oleh Pemustaka Di Perpustakaan IAIN Kediri," *Dirasab : Jurnal Studi Ilmu dan Manajemen Pendidikan Islam* 4, no. 1 (2021).

anywhere because access to this application is 24 hours, And this material has been widely stored in softcopy form and shows efficiency in terms of cost and time.

Research that has been conducted by ¹⁴ provides an explanation of a web-based Islamic library service that can be accessed anywhere, but has not technically designed this application, Research ¹⁵ only catalogs digital pdf e-book files which later the link will be connected to online e-book service providers, application development carried out ¹⁶, ¹⁷, and ¹⁸ implementing digital libraries in schools for libraries with a collection of books in general, in this research the author tried to develop a website-based e-book library application whose collection only focuses on Islamic law so that it becomes a digital literacy media within the Sharia Faculty of UIN Sultan Maulana Hasanuddin Banten which can be accessed anywhere and anytime.

Knowledge of Islamic law for the Academic Community is a necessity, basically the purpose of the Sharia Faculty of UIN Sultan Maulana Hasanuddin Banten one of them is to produce scholars who have academic competence in the field of law, more specifically it is explained that these competencies are inseparable from Islamic law, so one alternative in deepening this knowledge is to be literate related to the science.

The achievement of competence, especially knowledge of Islamic law through literacy activities can be achieved by the availability of a library media, the library is one place to mediate literacy activities, the Sharia Faculty of UIN Sultan Maulana Hasanuddin Banten has a library with a conventional system and still has a collection of books that are

¹⁴ Habiba Nur Maulida, "LAYANAN PUSTAKA ISLAM BERBASIS DIGITAL," *IQRA': Jurnal Ilmu Perpustakaan dan Informasi (e-Journal)* 13, no. 2 (2019).

¹⁵ Ridwan Subula and Ahmad Rio Adriansyah, "Pengembangan Aplikasi Katalog Dan Manajemen Dokumen Bertipe PDF Untuk Ebook Berbasis Website," *Jurnal Informatika Terpadu* 7, no. 2 (2021).

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ Ibid.

limited by space and time both in terms of collection and access, So that to serve the literacy needs of the academic community is still limited.

In this research, a web-based e-book library application will be tried that can be accessed through a website application platform as a digital literacy activity service so that the literacy of the academic community of the Sharia Faculty can be accommodated properly, which focuses on the collection of digital e-books about Islamic law, so that it can mediate the extraction of knowledge about Islamic law anytime and anywhere, The benefits of the results of this research theoretically add Science insight into the development of multi-access website-based applications both using PHP programming language (preprocessor hyper Preprocessor) which is most widely used in making websites, and practically the results of this research are an application that can be used for digital libraries (e-book libraries) which do not limit the place to store books related to Islamic law, so that they can be used by libraries in the environment Faculty of Sharia Sultan Maulana Hasanuddin State Islamic University Banten.

B. RESEARCH METHOD

This research uses the Development Research method or also known as Research and Development (R & D), based on ¹⁹ ²⁰²¹ revealed that development research is a process used to develop and validate a product to be more effective, test treatment and revision of evaluation results will continue to be carried out through a research cycle to get the expected results, Strategy to develop a product by *Borg and Gall* referred to as research and development, which is a process used to develop and validate products, R&D steps can be simplified and adjusted to the needs of researchers because research using R&D on a large scale requires a lot

¹⁹ L.R. Gay, *Educational Evaluation and Measurement: Com-Petencies for Analysis and Application*, Second. (New York: Macmillan Publishing Company, 1991).

²⁰ development research is an effort to develop an existing product to be more effective, and efficient and does not aim to test an existing theory, while according to

²¹ W.R Borg and M.D Gall, "Educational Research an Introduction Fourth Edition," *Longman Inc* 1, no. 1 (1983).

of money, long time, and originality. The cycle in development research is as follows:

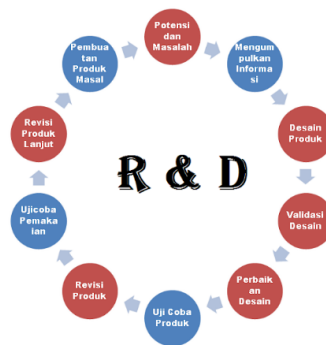


Figure 1 RnD Step

The discussion of this research will focus on the cycles that exist in research based on ²² where the cycles are described as follows: 1. Research and Data Collection, This stage of research conducts literature studies and field studies, 2. Planning, At this stage the research conducts a product plan / design accompanied by the results of feasibility analysis and functionality, 3. Initial Product Development, At this stage make a prototype of the product to be tested, 4. Initial product trials, At this stage will be carried out trials on the table and limited testing with a limited number of respondents, 5. Initial Product Improvement, At this stage the initial product improvement is carried out after limited trials and evaluation of limited trial results, 6. Wider Field Trials, namely wider trials to get better evaluation results, 7. Product Improvement from Wider Field Test Results, at this stage improvements are carried out better than the evaluation of wider field trial results, 8. Final Product Trial, at this stage a cob test will be carried out to measure a product's feasibility for use, 9. Revision or Improvement of the Final Product, the results of the evaluation and input from the final product trial are then made improvements at this stage so that the product is ready for use, 10. Dissemination and Implementation, at this stage the implementation is carried out within a certain period of time while seeing the development of implementation results.

²² Ibid.

C. RESULT AND DISCUSSION

The procedural model developed for this product is an adaptation model by ²³. There are 10 stages 1) determining goals and needs, 2) gathering reference materials, 3) studying content, 4) brainstorming, 5) product design, 6) creating flowcharts, 7) creating storyboards, 8) program books, 9) creating supporting books, and 10) evaluation and revision.

1. Define Goals and Needs

The learning book in this product is an energy-saving thematic learning theme. The goal is that Users can more easily understand the concept of a book. In addition, users can also read books on the application and can take advantage of waiting times or when there is no activity. At this stage researchers determine the needs in the implementation of development. The needs are theoretical studies, study materials, books on Islamic law, and the development of media and computers / laptops.

2. Gather Reference Materials

The reference materials collected include books related to Islamic law for users, and supporting books. Developers look for as much reference material as possible to reinforce and simplify the concepts that will be provided to the User.

3. Explore Content

Activities at this stage are learning reference materials that have been collected in the previous stage. Developers do not wait until all reference materials are collected. At the stage of studying the content, developers study the existing reference materials and gradually.

4. Brainstorming

Developers develop applications from previously researched reference materials. The developer determines that the e-book library has the following characteristics: 1) using colors to make users interested in the media, 2) having complete reading, 3) using easy-to-

²³ Ibid.

select display menus, 4) using animations on book concepts, 5) using different colors in any book.

Data are quantitative data and qualitative data. Quantitative data is an assessment of the Linkert scale. Qualitative data is the assessment or suggestion of validators as in Table 1 below

Table 1 Validation Assessment Criteria by Experts and Users

| Criterion | Description: | Skor |
|-----------|--------------|------|
| SB | Excellent | 5 |
| B | Good | 4 |
| C | Fair | 3 |
| D | Bad | 2 |
| E | Very Bad | 1 |

The initial development of this application uses PHP programming language (*Preprocessor Hyper Preprocessor*) version 7.3.3.1 and uses MySQL database 5.0.11 which is bundled with Xampp application 7.3.31. The application runs smoothly and functionality runs well from the user side or from the admin side.

Display applications that are opened through the internet browser using a user account



Figure 2 First Interface



Figure 2 User Interface

The interface using admin user through web browser



Figure 3 First Interface



Figure 4 add book interface (admin)

At this stage the author tries to validate the results of the development of the Islamic law e-book library application in order to get the expected results starting with validation by experts shown in table 2, where validators provide comments on the final validation results.

Tabel 2. Expert Validation Result

| Aspect | Research Statement | Category | Value |
|----------------------------|---|----------|-------|
| Validity | The correctness of the concept in explaining the book | B | 4 |
| | The correctness of examples in explaining the book | C | 3 |
| | Books are arranged systematically | B | 4 |
| Level of importance | The relevance of teaching books to Competencies | B | 4 |
| | The relevance of teaching books to Competencies | B | 4 |
| Benefits | The book presented can improve the User's comprehension ability | C | 3 |
| | The book presented can stimulate the User to think coherently | B | 4 |
| | The book presented can improve the User's critical thinking skills | B | 4 |
| | The book presented can increase the social sensitivity of the User | B | 4 |
| Learnability | The book presented is in accordance with the User's level of thinking | B | 4 |
| | Convenience in media use | SB | 5 |
| Interest | The book presented can arouse further User curiosity | B | 4 |
| | The books presented give rise to a higher impetus for active learning | B | 4 |
| | The contribution of books in providing learning motivation for Users | B | 4 |
| | The contribution of books in fun learning | B | 4 |
| Simplicity | Simplicity of layout in design | B | 4 |
| | Annotation placement is positioned | C | 3 |

| | | | |
|-------------------------|--|-------------------------|---|
| | simply | | |
| Alignment | Book writing using concise sentences | B | 4 |
| | Image selection supports the book being delivered | B | 4 |
| | The overall design is in accordance with the theme | C | 3 |
| | The book cover reflects the entire content of the book | C | 3 |
| | The title reflects the content of each chapter's book | C | 3 |
| Emphasis | The contribution of the application in attracting the attention of Users | B | 4 |
| | The contribution of the application in encouraging User learning interest | B | 4 |
| Balance | Balance between picture and text | C | 3 |
| Order | Clarity of the order of books to be studied | B | 4 |
| Shape | The shape of the picture can be visualized to resemble reality in life | B | 4 |
| Room | There is a space that limits the image with text so it does not seem crowded | B | 4 |
| Texture | Moved image credentials | C | 3 |
| Colour | Accuracy of colour selection in design and text | B | 4 |
| Total | | 113 | |
| Score Percentage | | 75% | |
| Score Interval | | 102 < X ≤ 126 | |
| Average | | 3,76 | |
| Description | | Good | |

Source: Processed primary data

The theme of Islamic law has a good design to make it easier for users. At the beginning of opening the application, the User will see the display of the opening menu after which the User is asked to log in. The user clicks on the book you want to read. In each view, there are many symbols that are instructions, menus and exits. Symbol instructions to inform the User of the function of each symbol. Instruction symbols, book symbols on the main menu to select books and cross symbols used to exit the e-book library.

The User selects the book to be studied, then the application directs the User to select the book in order. All books can be read and downloaded by the user in the application after logging in, and the user can log in after registering an account. Before this application is used in accordance with the development research method, it is necessary to validate it by experts.

After media validation by book experts and media experts, the product was revised based on comments and suggestions from book experts and media experts. The revised product was used in media usage tests. The test of media use by users is carried out at the Sharia Faculty. The implementation of media use tests was carried out twice, namely in limited trials and usage trials. The media use test carried out twice is a media development process to produce visual media ebook library.

The limited trial was conducted on Tuesday, September 10, 2022. The following is a table of test results of media use by students in limited trials.

After testing the use of media by teachers in limited trials and revisions, researchers tested the use of media by teachers in a trial of use on September 15, 2022. The results of the test of application use by users in the trial use are as follows.

Table 3. Application Usage Test Results in Usage Trial

| Aspect | Research Statement | Category | Value |
|----------|---|----------|-------|
| Validity | The correctness of the concept in explaining the book | B | 4 |
| | The correctness of examples in explaining the book | B | 4 |
| | Books are arranged systematically | B | 4 |

| | | | |
|----------------------------|---|----|---|
| Level of importance | The relevance of teaching books to Competencies | B | 4 |
| | The relevance of teaching books to Competencies | B | 4 |
| Benefits | The book presented can improve the User's comprehension ability | SB | 5 |
| | The book presented can stimulate the User to think coherently | SB | 5 |
| | The book presented can improve the User's critical thinking skills | B | 4 |
| | The book presented can increase the social sensitivity of the User | B | 4 |
| Learnability | The book presented is in accordance with the User's level of thinking | B | 4 |
| | Convenience in media use | SB | 5 |
| Interest | The book presented can arouse further User curiosity | B | 4 |
| | The books presented give rise to a higher impetus for active learning | B | 4 |
| | The contribution of books in providing learning motivation for Users | B | 4 |
| | The contribution of books in fun learning | B | 4 |
| Simplicity | Simplicity of layout in design | C | 3 |
| | Annotation placement is positioned simply | B | 4 |
| | Book writing using concise sentences | B | 4 |

| | | | |
|-------------------------|--|-------------------------|---|
| Alignment | Image selection supports the book being delivered | B | 4 |
| | The overall design is in accordance with the theme | C | 3 |
| | The book cover reflects the entire content of the book | C | 3 |
| | The title reflects the content of each chapter's book | C | 3 |
| Emphasis | The contribution of the application in attracting the attention of Users | B | 4 |
| | The contribution of the application in encouraging User learning interest | B | 4 |
| Balance | Balance between picture and text | C | 3 |
| Order | Clarity of the order of books to be studied | B | 4 |
| Shape | The shape of the picture can be visualized to resemble reality in life | B | 4 |
| Room | There is a space that limits the image with text so it does not seem crowded | B | 4 |
| Texture | Moved image credentials | C | 3 |
| Colour | Accuracy of colour selection in design and text | B | 4 |
| Total | | 117 | |
| Score Percentage | | 78% | |
| Score Interval | | 102 < X ≤ 126 | |
| Average | | 3,9 | |
| Description | | Good | |

Source: Processed primary data.





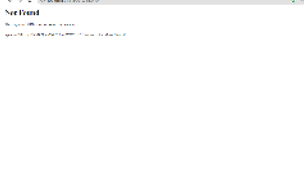

Based on the results of the application usage test by the user above, it can be seen that the developed media goes through a revision process and usage test twice. In the test of application use by users in limited trials, the developed media obtained an average score of 3.76 in the good category, and in the test of application use by users in the use trial obtained an average score of 3.9 in the good category. From the results obtained, it can be said that the visual media *E-book Library* with Islamic law books developed by researchers has experienced good development and received a positive response from teachers. This can be proven by the average score obtained has increased.

Overall, the score of each statement item, whether from valid or valid aspects, level of importance, usefulness, learnability, attractiveness, simplicity, integration, emphasis, balance, line, shape, texture, space, and color gets a score varying between 3, 4 and 5. The lowest score overall was 3, while the highest score was 5. Based on the results of tests on the use of media by teachers in limited trials and usage trials, there was an increase in scores in the statement items. In the validity aspect, in limited trials it got a score of 3, but after revision and usage trials, the score became 4. In the aspect of usefulness, from a score of 3 to 5. Media usage tests in limited trials and usage trials are stages to produce good E-book Library visual media. The E-book Library application with Islamic law books developed in accordance with the preparation of good visual media includes valid or valid aspects, levels of importance, usefulness, learnability, attracting interest, simplicity, integration, emphasis, balance, line, shape, texture, space, and color.

Based on the results of initial validation by experts and users there are several items in the application that need to be revised, based on analysis, the revision of the e-book library is as follows.

Table 4 E-book Library Revisions Based on Expert Validation

| No | Revised overview | Before revision | After revision |
|----|------------------|-----------------|----------------|
|----|------------------|-----------------|----------------|

| | | | |
|---|--|---|--|
| 1 | Missing Login button |  |  |
| 2 | Menu size click here to read too small |  |  |
| 3 | File not found |  |  |

After revising the application, a second validation was carried out for improvement in terms of functionality and technical side using the same instrument for validation both from the expert side and from the user side, table 5 shows the results of expert validators as follows:

Table 5. Expert Validation Results

| Aspect | Research Statement | Category | Value |
|----------------------------|---|----------|-------|
| Validity | The correctness of the concept in explaining the book | B | 4 |
| | The correctness of examples in explaining the book | B | 4 |
| | Books are arranged systematically | B | 4 |
| Level of importance | The relevance of teaching books to Competencies | B | 4 |
| | The relevance of teaching books to Competencies | B | 4 |
| Benefits | The book presented can improve the User's comprehension ability | B | 4 |

| | | | |
|---------------------|---|----|---|
| | The book presented can stimulate the User to think coherently | SB | 5 |
| | The book presented can improve the User's critical thinking skills | SB | 5 |
| | The book presented can increase the social sensitivity of the User | B | 4 |
| Learnability | The book presented is in accordance with the User's level of thinking | SB | 5 |
| | Convenience in media use | SB | 5 |
| Interest | The book presented can arouse further User curiosity | SB | 5 |
| | The books presented give rise to a higher impetus for active learning | SB | 5 |
| | The contribution of books in providing learning motivation for Users | B | 4 |
| | The contribution of books in fun learning | B | 4 |
| Simplicity | Simplicity of layout in design | B | 4 |
| | Annotation placement is positioned simply | B | 4 |
| | Book writing using concise sentences | SB | 5 |
| Alignment | Image selection supports the book being delivered | SB | 5 |
| | The overall design is in accordance with the theme | SB | 5 |
| | The book cover reflects the entire content of the book | B | 4 |
| | The title reflects the content of each chapter's book | B | 4 |
| Emphasis | The contribution of the application in attracting the attention of Users | B | 4 |
| | The contribution of the application in encouraging User learning interest | SB | 5 |

| | | | |
|-------------------------|--|---|-----------------------|
| Balance | Balance between picture and text | B | 4 |
| Order | Clarity of the order of books to be studied | B | 4 |
| Shape | The shape of the picture can be visualized to resemble reality in life | B | 4 |
| Room | There is a space that limits the image with text so it does not seem crowded | B | 4 |
| Texture | Moved image credentials | B | 4 |
| Colour | Accuracy of colour selection in design and text | B | 4 |
| Total | | | 110 |
| Score Percentage | | | 88% |
| Score Interval | | | X > 105,006 |
| Average | | | 4,4 |
| Description | | | Very Good |

Source: Processed primary data

According to the results of the second validation by experts in table 6 compared to the first validation there was an increase in the average value and criteria with a percentage value of 88%, the average value obtained was 4.4 with very good criteria compared to the initial validation which only got a percentage value of 75%, the average value obtained was 3.76 with good criteria.

The results of the second validation by the user obtained the following results:

Tabel 6. The result of user validation

| Aspect | Research Statement | Category | Value |
|----------------------------|---|-----------------|--------------|
| Validity | The correctness of the concept in explaining the book | B | 4 |
| | The correctness of examples in explaining the book | B | 4 |
| | Books are arranged systematically | B | 4 |
| Level of importance | The relevance of teaching books to Competencies | B | 4 |

| | | | |
|---------------------|---|----|---|
| | The relevance of teaching books to Competencies | B | 4 |
| Benefits | The book presented can improve the User's comprehension ability | SB | 5 |
| | The book presented can stimulate the User to think coherently | B | 4 |
| | The book presented can improve the User's critical thinking skills | B | 4 |
| | The book presented can increase the social sensitivity of the User | B | 4 |
| Learnability | The book presented is in accordance with the User's level of thinking | B | 4 |
| | Convenience in media use | B | 4 |
| Interest | The book presented can arouse further User curiosity | B | 4 |
| | The books presented give rise to a higher impetus for active learning | B | 4 |
| | The contribution of books in providing learning motivation for Users | B | 4 |
| | The contribution of books in fun learning | B | 4 |
| Simplicity | Simplicity of layout in design | B | 4 |
| | Annotation placement is positioned simply | B | 4 |
| | Book writing using concise sentences | B | 4 |
| Alignment | Image selection supports the book being delivered | B | 4 |
| | The overall design is in accordance with the theme | B | 4 |
| | The book cover reflects the entire content of the book | B | 4 |
| | The title reflects the content of each chapter's book | B | 4 |
| Emphasis | The contribution of the application in attracting the attention of Users | B | 4 |
| | The contribution of the application in encouraging User learning interest | B | 4 |
| Balance | Balance between picture and text | B | 4 |

| | | | |
|-------------------------|--|----------------|---------------|
| Order | Clarity of the order of books to be studied | SB | 5 |
| Shape | The shape of the picture can be visualized to resemble reality in life | B | 4 |
| Room | There is a space that limits the image with text so it does not seem crowded | B | 4 |
| Texture | Moved image credentials | B | 4 |
| Colour | Accuracy of colour selection in design and text | B | 4 |
| Total | | 110 | |
| Score Percentage | | 81% | |
| Score Interval | | 67,98 | < X |
| | | ≤ 83,94 | |
| Average | | 4,05 | |
| Description | | Good | |

According to from the results of the second validation by users in table 6 also got an increase compared to the first validation there was an increase in the average value and criteria with a percentage value of 81%, the average value obtained was 4.05 with very good criteria compared to the initial validation which only got a percentage value of 78% the average value obtained was 3.9 even though the criteria were still in good criteria. However, from the record, there is no revision of the validation results carried out so that the application can be implemented.

D. CONCLUSION

Based on the results of the discussion in the previous chapter, it shows that getting an increase compared to the first validation there is an increase in the average value and criteria with a percentage value of 81%, the average value obtained is 4.05 with very good criteria compared to the initial validation which only gets a percentage value of 78%, the average value obtained is 3.9 even though the criteria are still in good criteria. So that this application can be implemented so that it can be concluded that this application can be used and can build digital literacy of students and the academic community.

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