



Feasibility of Digital-based Flipbook Teaching Materials to Improve Learning Outcomes of Grade V Elementary School Students

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Abstrak

Bahan ajar merupakan salah satu komponen penting dalam pembelajaran. Penggunaan bahan ajar cetak tidak memuat materi secara lengkap sehingga menjadikan rendahnya hasil belajar siswa. Penelitian ini bertujuan untuk menganalisis kelayakan bahan ajar flipbook pola lantai dansa plate berbasis digital sebagai solusi untuk meningkatkan hasil belajar siswa. Metode penelitian ini adalah Research and Development (RnD) yang dikembangkan dengan model ADDIE. Subjek penelitian ini adalah ahli materi, ahli bahan ajar digital, guru dan siswa kelas V. Metode yang digunakan untuk mengumpulkan data penelitian melalui observasi, wawancara, dan angket digunakan untuk memperoleh data penilaian dari ahli materi, ahli bahan ajar digital, respon siswa, dan guru. Teknik analisis data yang digunakan adalah data kualitatif dan kuantitatif. Hasil penelitian menunjukkan kelayakan bahan ajar flipbook berbasis digital dari ahli materi sebesar 91,5% dengan kategori sangat layak, sedangkan hasil validasi ahli bahan ajar digital sebesar 95% dengan kategori sangat layak. Hasil penelitian ini menunjukkan bahwa bahan ajar pola lantai dansa plate berbasis digital flipbook layak digunakan dalam pembelajaran tari di sekolah dasar.

Kata Kunci: Bahan Ajar Digital, Flipbook, Pola Lantai.

Abstract

Teaching materials are one of the important components in learning. The use of printed teaching materials does not contain complete material so that it makes the low learning outcomes of students. This study aims to analyze the feasibility of digital-based flipbook teaching materials for plate dance floor patterns as a solution to improve student learning outcomes. This research method is Research and Development (RnD) developed with the ADDIE model. The subjects of this study were material experts, digital teaching material experts, teachers and fifth grade students. The method used to collect research data through observation, interviews, and questionnaires were used to obtain assessment data from material experts, digital teaching material experts, students, and teacher responses. The data analysis techniques used are qualitative and quantitative data. The result showed that the feasibility of digital-based flipbook teaching materials from material experts was 91,5% with a very feasibility category, while the result of the validation of digital teaching material experts were 95% with a very feasibility category. The results of this study indicate that digital-based flipbook teaching materials for plate dance floor patterns are suitable for use in learning dance in elementary schools.

Keywords: Digital Teaching Materials, Flipbook, Floor Patterns.

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1. INTRODUCTION

Art education is education that uses art as a means to convey knowledge, values beliefs and cultural skills. The uses of art as a means of learning for students to know, live, absorb, and instil in themselves culture in everyday life. Art education as an educational medium is an appropriate means to maintain and develop potential as individuals, socially, and culturally to achieve educational goals (Dini, 2020; Liu et al., 2020). Art education is one of the factors in the formation of childrens character. One of the subject contents in elementary schools is Cultural Arts and Crafts (SBdP). Cultural arts and crafts education is education that includes fine arts, music, dance, and skills (Hau et al., 2020; Millatina et al., 2022). Cultural arts and crafts have a role in shaping childrens personalities as a basis for forming good character and personality. The function and purpose of learning cultural arts

and crafts is to develop the students behavior, abilities, and enthusiasm for work so as to form a creative attitude and be able to think critically in facing the times (Desyandri et al., 2021; Millatina et al., 2022). Learning in elementary schools currently refers to the 2013 curriculum. Curriculum 2013 is designed with integrated thematic learning. The learning that is carried out focuses on students so that the teacher only acts as a facilitator (Ariani, 2020; Oktavia & Agustin, 2019).

Learning tools are things that must be prepared before learning activities to achieve learning objectives. One of the components in the learning system that has an important role is teaching materials. The use of appropriate teaching materials helps students to achieve the expected competencies (Hakim, 2018; Prastitasari et al., 2021). Teaching materials are used as guidelines in delivering material from teachers to students. The use of interesting teaching materials can make it easier for students to learn the material (Hadiyanti, 2021; Martatiyana et al., 2022). The quality of learning can be realized with adequate teaching materials. Teaching materials used by teachers can affect the success of the teaching and learning process. Teachers are expected to design teaching materials that are in accordance with the needs of students who are guided by basic competencies, core competencies and indicators as the objectives of learning activities (Hulu et al., 2023; Manzil et al., 2022; Yulaika et al., 2020). Teaching materials used by teachers in learning should be able to encourage the active role of students in learning activities. The purpose of learning is to improve and increase the knowledge that has been owned (Masriani & Mayar, 2021; Wahyudi et al., 2021). Current education makes teachers provide meaningful, creative and innovative learning that utilizes technology. The use of technology in learning materials makes learning materials more interesting with a combination of the text, video, animation and so on that can be used anywhere and anytime (Juliarti, 2022; Khoiron et al., 2021; Vioeza et al., 2022). The innovation of technology-based teaching material can affect student learning outcomes so that there is an increase in learning outcomes during the learning process (Papadakis et al., 2020; Setiyani et al., 2022).

However, in reality in learning dance floor pattern material. Teachers have not used digital-based teaching materials. Based on the result of observations and interviews conducted by researchers with fifth grade teachers at SD Muhammadiyah 1 Sine on January 9, 2023 it was stated that the teaching materials used in learning were only printed books which were classified as incomplete in explaining dance floor pattern material. The book used only explain the material in the form of reading text, illustrative images of floor patterns that only explain several types of floor patterns. The use of material sources that are less varied will have an impact on learning outcomes and student interest (Abdullah, 2012; Juniari & Margunayasa, 2022). Teaching materials are one of factors in the success of learning. The learning results of class V students show that in the knowledge aspect there are students' scores that have not met the minimum completeness criteria (KKM) of 28 students, there are 15 students (54%) who have not completed the KKM while 13 students (46%) have completed the KKM. Printed teaching materials in the form of text cause a lack of interest and motivation for students to learn (Roemintoyo & Budiarto, 2021; Sufianti & Nurdyansyah, 2023). Based on these problems, one solution to overcome them is to use digital-based teaching materials that can be used by teachers to deliver floor pattern material interactively to students. The use of technology in the field of education is the use of digital-based flipbook teaching materials that are made interactively, easy to access independently and provide benefits for students in the learning process (Maharcika et al., 2021; Prasetyono & Hariyono, 2020). Teaching materials are a set of lessons that contain learning materials, limitation methods, and evaluations that are made systematically and interestingly to achieve the objectives to be achieved in the learning process (Kurniasari, 2020; Yulandari & Mustika, 2021). The use of various teaching materials makes it easier for teachers to convey learning

materials so as to improve students' abilities. Teaching materials that are compiled completely can make students learn independently. Digital teaching materials are teaching materials that are developed digitally by utilizing technology and communication (Aprilia & Suryadarma, 2020; Sari & Mansyur, 2020). Technology-based digital teaching materials are presented in an attractive and interactive manner by combining text, images, and videos. The use of flipbook digital teaching materials in learning students not only read the material but are required to carry out activities such as observing videos, answering available questions, so that students are able to learn independently to develop their potential abilities (Manzil et al., 2022; Riyanto et al., 2020).

The technology used to create digital teaching materials is flipbook. Flipbook is a digital device that is able to change the appearance of a PDF file to be like opening a book digitally. Digital flipbooks can present learning materials in the form of text, images, video, and audio that are easy to use with attractive features so as to increase students learning activities (Martatiyana et al., 2022; Putra et al., 2023). The application used to create a flipbook display is heyzone flipbook. Heyzone flipbook is a website-based application for converting PDF files, images, text, and videos into flipbook displays with effects such as opening a book on each page (Amanina & Muchlis, 2023; Amanullah, 2020). Flipbook has a display that can be customized according to the wishes of the user, so that students can organize existing pages with navigation buttons. The purpose of this study was to analyze the feasibility of digital-based flipbook teaching materials on plate dance floor patterns to improving the learning outcomes of fifth grade students. So it is hoped that the development of digital-based flipbook teaching materials can have impact in learning activities that can have a positive impact on students' interest in learning and learning outcomes.

2. METHODS

This research is a study that uses the research and development (RnD) method. The research model used in this research is the ADDIE model, namely Analyze, Design, Development, Implementation, and Evaluation (Tegeh et al., 2014). The subjects of this study were material experts, digital teaching material experts, teachers and fifth grade students. The trial subjects were divided into 2 groups, namely small groups and large groups. The method used to collect research data through observation, interviews, questionnaires were used to obtain assessment data from material experts, digital teaching material experts, students, and teacher responses. The data analysis techniques used are qualitative and quantitative data. Qualitative data analysis is carried out by systematically compiling data obtained from observations and interviews. While quantitative data analysis is obtained from the result of product validation and responses from teachers and students. The instrument used to collect quantitative data is a validation questionnaire given to a team experta, the result of responses from students and teachers and tests (Purwono, 2014)(Kosasih, 2021). The instrument grids in this study can be seen in Table 1, Table 2, and Table 3.

Table 1. Material Expert Instrument

No	Aspect	Indicator	Numbers
1.	Curriculum suitability	The material has KI and KD	1
		The material is in accordance with the indicators	2
		The material is in accordance with learning objective	3
2.	Material suitability	The subject matter is based on the ability of students	4
		The content of the material in the material is structured	5
		The material contains bloom taxonomy C1-C5	6-11

No	Aspect	Indicator	Numbers
3.	Content feasibility	The suitability of illustrations, images, and videos is clear	12-15
4.	Language	Grammatical accuracy	16,17
		Sentence accuracy	18,19
		Language used is developmentally appropriate	20

Table 2. Digital Teaching Materials Experts Instrument

No	Aspect	Indicator	Numbers
1.	Suitability of teaching materials	There is a knowledge KD	1
		Teaching materials make students learn independently	2
		Teaching materials increase students interest in learning	3
2.	Graphics	Size of teaching materials	4,5
		The cover design is equipped with an attractive image	6
		The color of teaching materials uses bright colors	7
		The letters used do not vary much	8
		Letter display is clear and easy to read	9
		Spacing between lines of normal text arrangement	10
		Presentation of images, audio, and video	11-17
		Background color is clear	18
		Selection of application type for development	19
	Appropriate layout	20	

Table 3. Teacher and Students Response Instrument

No	Indicator	Numbers
1.	Learning independence	1
2.	Benefits of teaching materials	2,3
3.	Display of teaching materials	4
4.	Images and videos in teaching materials	5
5.	Combination of text, images, and audio	6
6.	Color combination	7,8,9,10
7.	Evaluation questions in teaching materials	11
8.	Language used in teaching materials	12,13
9.	Use of teaching materials	14,15

The data obtained is then subjected to categorization analysis. The data resulting from the quantitative analysis will be converted into qualitative data by classifying the scores into score intervals. This stage is carried out to determine the category score and score of the product analysis results. The data categorization stage in this development research uses a conversion table, the conversion table includes a product validation conversion table by material experts, digital teaching material experts and response questionnaires. The table used in categorizing research data is seen in [Table 4](#).

Table 4. Product Feasibility Criteria

Presentage	Criteria
81.26%-100%	Very Decent
62.5%-81.25%	Feasible
43.76%-62,5%	Decent Enough
25%-43.7%	Not Feasible

3. RESULTS AND DISCUSSION

Result

This study develops a digital-based flipbook teaching materials product on plate dance floor patterns for grade V SD. This development utilizes the ADDIE development model which includes five stages, namely Analyze, Design, Development, Implementation, and Evaluation. The first stage is the Analyze stage, which aims to obtain information related to the needs needed as a solution in solving the problems found. The analysis was conducted by conducting observations and interviews with fifth grade teachers at SD Muhammadiyah 1 Sine. At this stage, it is known that the problem in learning dance floor patterns materials is the lack of teaching materials used by students when understanding plate dance floor patterns material. The teaching materials available are only thematic books that are less complete in containing floor pattern material. The lack of teaching materials used in learning will affect the learning outcomes of students. Therefore, it is necessary to have interesting teaching materials, one of which is digital-based flipbook teaching materials which can be a solution to the problems found by researchers based in the data are then analyzed needs related to what is needed in digital-based flipbook teaching materials. Needs analysis is an important factor in product development so that the products developed are in accordance with the needs of teachers and students so that they can overcome the problems that occur.

The second stage is Design. After obtaining research data and analyzing the needs of the product to be developed, the product is then designed according to user needs. Product design is carried out with a design for making flipbook teaching materials. The design of making flipbook teaching materials is visualized in the form of communicative storyboard. Flipbook teaching materials are designed by selecting components ranging from fonts, teaching materials sizes, covers, backgrounds, images, videos, materials, and evaluation questions. The fonts used in making flipbook teaching materials is Comic Sans MS which is adjusted to the appearance of the heyzine flipbook website. Teaching materials are made in word format and then converted into PDF format. After becoming a PDF format, the next step is to convert the file into a flipbook through the heyzine website. Heyzine flipbook is a website used to create a digital flipbook display that is equipped with features to dd images, videos, audio, animations, and links. Flipbook teaching materials have been made can be dwnloaded in HTML format and then can be accessed via laptops, computers, and smartphones. The material developed is plate dance floor patterns material in learning Theme 6 Heat and Its Tranfer Subtheme 2 Heat Transfer around Learning 2 on KD 3.3 Understanding floor patterns in regional dance creations. Digital-based flipbook teaching materials are systematically designed starting from the cover, preface, KI, KD, indicators, learning objectives, usage guidelines, explanation of plate dance floor pattern material, material summary, author profile, evaluation questions, and bibliography. There are 10 multiple choice evaluation questions presented online through the quiziz application. Evaluation questions presented through quiziz are made with an attractive visual appearance. At this design stage, researchers also made validation instruments and responses to determine the quality of the teaching materials products developed. Product validation was carried out by material experts and digital teaching materials experts while responses by teachers and grade fifth students. The third stage is the Development stage. At this stage the researcher begins to develop the product inaccordance with the product design that has been made to realized as a digital-based flipbook teaching material product. This results of the development of digital-based teaching materials for floor patterns are shown in [Figure 1](#).



Figure 1. Development of Digital-based Flipbook Teaching Materials for Plate Dance Floor Pattern

In addition, at the design stage the researcher also carried out an assessment of the product of digital-based flipbook teaching materials on plate dance floor patterns that had been developed. Product validation is carried out by material experts and digital teaching material expert who aim to determine product feasibility. The product validation process was carried out twice and the results obtained were very feasible to use. The results obtained from material expert assessment and presented in [Table 5](#).

Table 5. Results of the Material Expert Validation Assessment

No	Assessed Aspects	Score	Category
1.	Curriculum suitability	100	Very Feasible
2.	Appropriateness of the material	87.5	Very Feasible
3.	Feasibility of content	93.7	Very Feasible
4.	Language	85	Very Feasible
Average		91.5%	Very Feasible

Based on the data in [Table 5](#), it can be seen that curriculum suitability aspect is 100 or very feasible, the material suitability aspect is 87.5 or very feasible, the content feasibility aspect is 93.7 or very feasible, and the language aspect is 85 or very feasible. So that an average of 91.5% is obtained with a very feasible category. After being declared valid and feasible to use from the material aspect, the next stage is to validate the product of digital-based flipbook teaching materials. Validation is carried out by digital teaching materials experts. The validation process aims to assess the feasibility of digital-based flipbook teaching materials from suitability aspects of teaching materials and graphic aspects which are carried out twice. The results obtained from the validation of digital teaching material experts are presented in [Table 6](#).

Table 6. Results of the Digital Teaching Material Expert Validation Assessment

No	Assessed Aspect	Score	Category
1.	Suitability of teaching materials	100	Very Feasible
2.	Graphics	91.1	Very Feasible
Average		95.5	Very Feasible

Based on the data in [Table 6](#), it is known that the results of the validation of digital teaching materials experts in the aspect of the suitability of teaching materials are 100 with very feasible category, then in the aspects of graphics of 91.1 with a very feasible category.

So that the average results the expert validation of digital teaching materials is 95.5%. The fourth stage of research is Implementation. At this stage, researchers implement the use of digital-based flipbook teaching material products that have been validated at the previous stage. Implementation is carried out by testing the use of digital-based flipbook teaching materials for plate dance floor patterns. The product trial was carried out involving 28 fifth grade students of SD Muhammadiyah 1 Sine who were divided into small groups and large groups. Students work on pretest and posttest questions to determine the effectiveness of flipbook teaching materials. The results of the pretest and posttest can be seen in [Table 7](#).

Table 7. Learning Results of Small Groups and Large Groups

Class	Activities	Average
Small groups	Pretest	51.6
	Posttest	78.3
Large groups	Pretest	48.1
	Posttest	76.3

Based on [Table 7](#), it can be seen that the small group pretest scores get an average of 51,6 and the large group pretest is 48.1. This value was obtained before students used flipbook teaching materials. After using digital-based flipbook teaching materials plate dance floor pattern, the post-test value of small group students is 78.3 and large group is 76.3. This shows that students are able to improved learning outcomes after using flipbook teaching materials. So it can be concluded that use of this digital-based flipbook teaching materials is effective for use in learning fifth grade plate dance floor patterns. After working on the posttest questions, students filled out a response questionnaire after using flipbook teaching materials in learning. The results of the questionnaire response of students and teacher to digital flipbook teaching materials for floor patterns can be seen in [Table 8](#).

Table 8. Results of Product Trial Responses

No	Trial Subjects	Skor	Kategori
1.	Small groups response	82.9%	Very Feasible
2.	Large groups response	81.9%	Very Feasible
3.	Teacher response	93.3%	Very Feasible

Based on the data in [Table 8](#), it shows that the results of the product trial of digital-based flipbook teaching materials on plate dance floor patterns obtained responses from small groups trials, large groups trials, and grade V teachers. The small group responses was 83.9% with a very feasible category, while from the large group response in the product trial, a score of 81.9% was obtained in the very feasible category, then the results of the teachers response to the use of flipbook teaching materials amounted to 93.3, with a category very feasible to use in learning. The fifth stage is Evaluation. Products that have been tested on research subjects are then reviewed at the evaluation stage. Evaluation is carried out by reviewing the product that have been developed. The evaluation stage is carried out by conducting an evaluation to improve and refine the product. Through evaluation activities, researchers are able to reveal the advantages and disadvantages of products that are further developed.

Discussions

In this development research, the product produced is a digital-based flipbook teaching materials on plate dance floor patterns for learning fifth grade students of SD Muhammadiyah 1 Sine, Ngawi Regency. This digital-based flipbook teaching material was

developed to overcome the problems of learning dance in elementary schools. Based on the results of validation from a team of experts as well as a response from students and teachers is get very good qualifications. So that the product of digital-based flipbook teaching materials for plate dance floor patterns is suitable for use in learning. Flipbook teaching materials are developed by emphasizing the role of the teacher to guide an students can learn to actively understand, analyze, and make conclusions. The students can build their knowledge (Puspitasari et al., 2020; Widiastuti & Dharmadi, 2021). So that teaching materials can be digital teaching materials that help teacher and students in learning cultural art and crafts, especially on dance floor pattern material. The use of digital-based flipbook teaching materials, makes teachers and students able to easily carry out learning. This flipbook teaching materials has advantages compared to other teaching materials such a containing core competencies, indicators, learning objectives, usage guides, online multiple choice evaluation questions, material summaries with images, videos, and audio that add to the ease and interest of students learning on floor pattern material tailored to the needs of students (Dayanti et al., 2021; Kusumaningrum & Masruro, 2022).

The application of digital-based flipbook teaching materials in learning activities can make teaching and learning activities take place effectively with features that help students to understand the material (Agustin et al., 2020; Rachim & Ambarwati, 2021). Flipbook teaching materials present material in the form of text, images, and videos to make it easier for students to understand the material (Putra et al., 2023; Putriani & Kristiantari, 2022). Flipbook teaching materials developed digitally can make it easier for teachers and students to ude them because they can be used independently anywhere and anytime with an internet network connection (Manzil et al., 2022; Ramadhina & Pranata, 2022). This teaching material can be accessed through HTML hyperlinks online through laptops, computers, and smartphones. The evaluation system for assessment is done online through the quiz application. Teachers can download students' scores in excel format to facilitate the management of students' scores. Multiple choice evaluation questions are automatically recorded as true of false. Based on the results sourced from this study, the use of digital-based flipbook teaching materials on plate dance floor patterns for fifth grade students of SD Muhammadiyah 1 Sine Ngawi Regency has achieved very good qualifications, so that this flipbook teaching material is suitable for use in the learning process. This is in accordance with the results of valdation from material experts and digital teaching material experts who obtained very good qualifications. Responses from teachers and students expressed great interest and enthusiasm when using flipbook teaching materials. The results of this study are in line with the results of previous studies which state that digital-based flipbook teaching materials can help students to master the material (Amanullah, 2020; Hadiapurwa et al., 2021; Manzil et al., 2022). Flipbook teaching materials as learning resources can increase students understanding of material and interest in learning (Hulu et al., 2023; Kusumaningrum & Masruro, 2022; Mutiara & Emilia, 2022).

The advantages of digital-based flipbook teaching materials products are that they provide an attractive appearance because the plate dance floor pattern learning material is equipped with images and videos needed, this helping students to actively learn. In addition, this teaching material can be used anywhere and anytime and is easy for teachers and students to use because it is equipped with clear and directed usage guidelines. The components in the flipbook teaching materials that have been developed are in accordance with the indicators set out in the validation instrument. The material developed in teaching materials is in accordance with KI dan KD reference in the 2013 curriculum as well as the suitability of indicators and learning objectives with basic competencies. The result of other studies also reveal that flipbook teaching materials have very good qualifications and suitable for use in the learning process (Martatiyana et al., 2022). The results of other studies state

that flipbook teaching materials can improve the learning outcomes of elementary school students (Dzakiyah et al., 2023). Based on the results supported by previous research, flipbook teaching materials are categorized as very good, so they are suitable for use in the learning process. The use of digital-based teaching materials in the form of flipbooks can enrich students' learning experiences. This research can be an example of innovation in basic education. The use of technology and digital-based learning methods can inspire the development of similar teaching materials in the future. Students can develop their technology skills through the use of digital flipbooks, which can be beneficial in a modern world that is increasingly dependent on technology. This research also has limitations, technology continues to develop, and digital flipbooks may become outdated or irrelevant in a few years. Therefore, it is necessary to consider the extent to which this technology will be relevant in the long term.

4. CONCLUSION

Based on the results of data analysis, the development of digital-based flipbook teaching materials on plate dance floor patterns material obtained a very feasible category from the validation results of material experts, digital teaching material experts, and responses from teacher and students. Therefore, it can be concluded that digital-based flipbook teaching materials for plate dance floor patterns are suitable for use in learning outcomes of grade V elementary school students. Flipbook teaching materials can be used through laptops, computers, and smartphones with internet coverage.

5. REFERENCES

- Abdullah, R. (2012). Pembelajaran berbasis pemanfaatan sumber belajar. *Jurnal Ilmiah Didaktika: Media Ilmiah Pendidikan Dan Pengajaran*, 12(2), 216–231. <https://doi.org/10.22373/JID.V12I2.449>.
- Agustin, D. Y., Setyosari, P., & Suharti. (2020). Pengembangan Bahan Ajar Tematik Digital Untuk Siswa Kelas V Sekolah Dasar. *Edcomtech Jurnal Kajian Teknologi Pendidikan*, 6(1), 140–150. <https://doi.org/10.17977/um039v6i12021p140>.
- Amanina, A. A., & Muchlis. (2023). Development of Assessment for Learning-oriented Electronic Student Worksheets to Improve Student Learning Outcomes on Acid-base Titration Material. *Jurnal Pijar Mipa*, 18(4), 518–524. <https://doi.org/10.29303/jpm.v18i4.5188>.
- Amanullah, M. A. (2020). Pengembangan Media Pembelajaran Flipbook Digital Guna Menunjang Proses Pembelajaran Di Era Revolusi Industri 4.0. *Jurnal Dimensi Pendidikan Dan Pembelajaran*, 8(1), 37. <https://doi.org/10.24269/dpp.v0i0.2300>.
- Aprilia, I., & Suryadarma, I. G. P. (2020). E-module of mangrove ecosystem (emme): development, validation and effectiveness in improving students' self-regulated. *Biosfer: Jurnal Pendidikan Biologi*, 13(1), 114–129. <https://doi.org/10.21009/biosferjpb.v13n1.114-129>.
- Ariani, T. (2020). Analysis of Students' Critical Thinking Skills in Physics Problems. *Kasuari: Physics Education Journal*, 3(1), 1–17. <https://doi.org/10.37891/kpej.v3i1.119>.
- Dayanti, Z. R., Respati, R., & Gyartini, R. (2021). Pengembangan Bahan Ajar Elektronik Flipbook dalam Pembelajaran Seni Rupa Daerah siswa kelas V di Sekolah Dasar. *Journal of Elementary Education*, 4(5), 704–711. <https://doi.org/10.22460/collase.v4i5.8187>.
- Desyandri, D., Yeni, I., Mansurdin, M., & Dilfa, A. H. (2021). Digital Student Songbook as

- Supporting Thematic Teaching Material in Elementary School. *Jurnal Ilmiah Sekolah Dasar*, 5(2), 342. <https://doi.org/10.23887/jisd.v5i2.36952>.
- Dini, T. A. (2020). Paradigma Pendidikan Seni Untuk Kehidupan Anak. *Jurnal Imajinasi*, 14(1), 50–56. <https://doi.org/10.15294/imajinasi.v14i1.27690>.
- Dzakiyah, M., Shidiq, A., & Permana, R. (2023). Development of Flipbook-Based Thematic Learning to Improve Elementary School Students Learning Outcomes. *Indonesian Journal of Classroom Action Research Journal Homepage*, 1(1), 22–26. <https://doi.org/10.53866/ijcar.v1i1.300>.
- Hadiapurwa, A., Listiana, A., & Efendi, E. E. (2021). Digital Flipbook as a Learning Media to Improve Visual Literacy for 4 th Grade Students at SDN Abdi Negara. *Jurnal Ilmu Informasi Perpustakaan Dan Kearsipan*, 10(1), 8–13. <https://doi.org/10.24036/116158-0934>.
- Hadiyanti, A. H. D. (2021). Pengembangan Modul Pembelajaran IPA Digital Berbasis Flipbook Untuk Pembelajaran Daring di Sekolah Dasar. *Jurnal Elementaria Edukasia*, 4(2), 284–291. <https://doi.org/10.31949/jee.v4i2.3344>.
- Hakim, L. (2018). Pengembangan Media Pembelajaran Pai Berbasis Augmented Reality. *Lentera Pendidikan: Jurnal Ilmu Tarbiyah Dan Keguruan*, 21(1), 59–72. <https://doi.org/10.24252/lp.2018v21n1i6>.
- Hau, N. H., Cuong, T. V., & Tinh, T. T. (2020). Students and Teachers' Perspective Of The Importance Of Arts In STEAM Education In Vietnam. *Journal of Critical Reviews*, 7(11), 666–671. <https://doi.org/10.31838/jcr.07.11.121>.
- Hulu, F. E., Harefa, P., Laila, D. A. E. L., & Harefa, T. (2023). Pengembangan E-Modul Berbasis Flipbook untuk Meningkatkan Minat Belajar Siswa Pada Materi Cerita Fantasi Kelas VII SMP Negeri 1 Botomuzoi. *Journal on Education*, 06(01), 4224–4232. <https://doi.org/10.31004/joe.v6i1.3555>.
- Juliarti, E. (2022). Development of Canva-Based Digital Teaching Materials to Train Students' Understanding of Dynamic Fluid Concepts. *International Journal of E-Learning and Multimedia*, 1(2), 73–77. <https://doi.org/10.58723/ijoem.v1i2.52>.
- Juniari, N. K., & Margunayasa, I. G. (2022). Android-Based Digital Teaching Materials on the Topic of Changes in the Shape of Elementary School Class V Objects. *Jurnal Ilmiah Sekolah Dasar*, 6(3), 525–533. <https://doi.org/10.23887/jisd.v6i3>.
- Khoiron, M., Harmanto, K., A., & Wardani, A. R. (2021). Development of Digital Social Studies Teaching Materials in The Era of Pandemic Emergency Learning. *The Indonesian Journal of Social Studies*, 4(1), 36–44. <https://doi.org/10.26740/ijss.v4n1.p>.
- Kosasih, E. (2021). *Pengembangan Bahan Ajar*. Bumi Aksara.
- Kurniasari, A. (2020). Analisis Efektivitas Pelaksanaan Belajar Dari Rumah (Bdr) Selama Pandemi Covid-19. *Jurnal Review Pendidikan Dasar: Jurnal Kajian Pendidikan Dan Hasil Penelitian*, 6(3), 1–8. <https://doi.org/https://doi.org/10.26740/jrpd.v6n3.p246-253>.
- Kusumaningrum, D., & Masruro, A. (2022). Development of Learning Media Flipbook Digital Comic Based on Local Wisdom to Increase Learning Interest. *Journal of Education and Learning Innovation*, 2(2), 117–122. <https://doi.org/10.35877/454ri.eduline814>.
- Liu, Q., Chen, H., Crabbe, C., & J, M. (2020). Interactive Study of Multimedia and Virtual Technology in Art Education. *International Journal of Emerging Technologies in Learning*, 16(1), 80–93. <https://doi.org/10.3991/IJET.V16I01.18227>.
- Maharcika, A. A. M., Suarni, N. K., & Gunamantha, I. M. (2021). Pengembangan Modul Elektronik (E-Modul) Berbasis Flipbook Maker Untuk Subtema Pekerjaan Di Sekitarku Kelas Iv Sd/Mi. *PENDASI: Jurnal Pendidikan Dasar Indonesia*, 5(2), 165–

174. https://doi.org/10.23887/jurnal_pendas.v5i2.240.
- Manzil, E. F., Sukamti, & Thohir, M. A. (2022). Pengembangan E-Modul Interaktif Heyzine Flipbook Berbasis Scientific Materi Siklus Air Bagi Siswa Kelas V Sekolah Dasar. *Kajian Teori Dan Praktik Pendidikan*, 31(2), 112–126. <https://doi.org/10.17977/um009v31i22022p112>.
- Martatiyana, D. R., Novita, L., & Purnamasari, R. (2022). Pengembangan Bahan Ajar Flipbook Manfaat Energi Kelas IV Di Sekolah Dasar. *Jurnal Madrasah Ibtidaiyah*, 8(1), 44–57. <https://doi.org/10.31602/muallimuna.v8i1.7244>.
- Masriani, M., & Mayar, F. (2021). Pengembangan Bahan Ajar dalam Pembelajaran Tematik dengan Menggunakan Metode Mind Mapping di Sekolah Dasar. *Jurnal Basicedu*, 5(5), 3513–3519. <https://doi.org/https://doi.org/10.31004/basicedu.v5i5>.
- Millatina, S. N., Maryanti, R., & Wulandary, V. (2022). Strengthening Literacy of Cultural Arts and Crafts in the Material of Sculpture for 6th-grade Elementary School Students through Learning Video Media. *Indonesian Journal of Educational Research and Technology*, 2(3), 189–194. <https://doi.org/10.17509/ijert.v2i3.38675>.
- Mutiara, E., & Emilia, E. (2022). Developing Flipbook-based Teaching-Learning Material in the Culinary Arts Program of Unimed. *International Journal of Education in Mathematics, Science and Technology*, 10(3), 650–662. <https://doi.org/10.46328/ijemst.2487>.
- Oktavia, A., & Agustin, H. (2019). Umbul Card: A Traditional Game as Nutrition Education Media among Elementary School Students. *International Journal of Educational Research Review*, 5(1), 1–9. <https://doi.org/10.24331/ijere.646821>.
- Papadakis, S., Vaiopoulou, J., Kalogiannakis, M., & Stamovlasis, D. (2020). Developing and Exploring an Evaluation Tool for Educational Apps (ETEA) Targeting Kindergarten Chil-dren. *Sustainability*, 12(10), 4201. <https://doi.org/10.3390/su12104201>.
- Prasetyono, R. N., & Hariyono, R. C. S. (2020). Development of Flipbook using Web Learning to Improve Logical Thinking Ability in Logic Gate. *International Journal of Advanced Computer Science and Applications*, 11(1), 342–348. <https://doi.org/10.14569/IJACSA.2020.0110143>.
- Prastitasari, H., Annisa, M., Sari, R., Prasetyo, A. R., Jannah, F., & Habibi. (2021). Pelatihan Pengembangan Perangkat Pembelajaran Berbasis Pendekatan Kontekstual Lahan Basah Bagi Guru SD Negeri Pemurus 2 Kabupaten Banjar Kalimantan Selatan. *ESJ (Elementary School Journal)*, 11(3), 266–274. <https://doi.org/https://doi.org/10.24114/esjpsd.v11i3>.
- Purwono, U. (2014). *Standar Penilaian Bahan Ajar*. BSNP.
- Puspitasari, R., Hamdani, D., & Risdianto, E. (2020). Pengembangan E-Modul Berbasis Hots Berbantuan Flipbook Marker Sebagai Bahan Ajar Alternatif Siswa SMA. *Jurnal Kumparan Fisika*, 3(3), 247–254. <https://doi.org/10.33369/jkf.3.3.247-254>.
- Putra, A. D., Yulianti, D., & Fitriawan, H. (2023). Pengembangan Bahan Ajar Berbasis Flipbook Digital untuk Meningkatkan Efektivitas Pembelajaran pada Siswa Sekolah Dasar. *Jurnal Ilmiah Ilmu Pendidikan*, 6(4), 2173–2177. <https://doi.org/10.54371/jiip.v6i4.1748>.
- Putriani, N. K., & Kristiantari, M. G. R. (2022). Flipbook Maker-Based Teaching Materials of thematic Learning for grade II Elementary School Students. *Jurnal Ilmiah Sekolah Dasar*, 6(3), 476–484. <https://doi.org/10.23887/jisd.v6i3.47133>.
- Rachim, D. A., & Ambarwati, R. (2021). Developing An E-Flipbook On Enviromental Change Topics To Develop Students' Digital Literacy. *EDUSAINS*, 13(1), 25–33. <https://doi.org/10.15408/es.v13i1.16893>.
- Ramadhina, S. R., & Pranata, K. (2022). Pengembangan E-Modul Berbasis Aplikasi Flipbook di Sekolah Dasar. *Jurnal Basicedu*, 6(4), 7265–7274.

- <https://doi.org/10.31004/basicedu.v6i4.3470>.
- Riyanto, Amin, M., Suwono, H., & Lestari, U. (2020). The new face of digital books in genetic learning: A preliminary development study for students' critical thinking. *International Journal of Emerging Technologies in Learning*, 15(10), 175–190. <https://doi.org/10.3991/ijet.v15i10.14321>.
- Roemintoyo, R., & Budiarto, M. K. (2021). Flipbook as Innovation of Digital Learning Media: Preparing Education for Facing and Facilitating 21st Century Learning. *Journal of Education Technology*, 5(1), 8. <https://doi.org/10.23887/jet.v5i1.32362>.
- Sari, T. R., & Mansyur, H. (2020). Koreografi Tari Piring Hoyak Badarai Di Sanggar Sarai Sarumpun Di Kota Padang. *Jurnal Sendratasik*, 9(2), 10–16. <https://doi.org/10.24036/jsu.v9i1.109503>.
- Setiyani, W., B., S., Sukestiyarno, Y. L., & Cahyono, A. N. (2022). E-Module Design Using Kvisoft Flipbook Application Based on Mathematics Creative Thinking Ability for Junior High Schools. *International Journal of Interactive Mobile Technologies*, 16(4), 116–136. <https://doi.org/10.3991/ijim.v16i04.25329>.
- Sufianti, M., & Nurdyansyah. (2023). Calistung E-Module Innovation For Strengthening Basic Literacy and Numeracy Student. *Jurnal Ilmiah Sekolah Dasar*, 7(2), 236–248. <https://doi.org/10.23887/jisd.v7i2.53454>.
- Vioreza, N., Supriatna, N., & Abdul Hakam, K. (2022). Development of Digital Teaching Materials Based on Betawi Local Food to Increase Ecoliteracy in Elementary School Students. *Al Ibtida: Jurnal Pendidikan Guru MI*, 9(2), 402–416. <https://doi.org/10.24235/al.ibtida.snj.v9i2.11888>.
- Wahyudi, G., Ramadhan, S., & Arief, D. (2021). Pengembangan Bahan Ajar Tematik Berbasis Model Picture and Picture di Sekolah Dasar. *Jurnal Basicedu*, 5(2), 966–973. <https://doi.org/10.31004/basicedu.v5i2.814>.
- Widiastuti, N. M. D., & Dharmadi, I. P. A. (2021). Klasifikasi Teknologi Dalam Jaringan Untuk Mendukung Proses Pembelajaran Di Era Merdeka Belajar. *Jurnal Pendidikan Teknologi Dan Kejuruan*, 18(2), 195. <https://doi.org/10.23887/jptk-undiksha.v18i2.34166>.
- Yulaika, N. F., Harti, H., & Sakti, N. C. (2020). Pengembangan Bahan Ajar Elektronik Berbasis Flip Book Untuk Meningkatkan Hasil Belajar Peserta Didik. *JPEKA: Jurnal Pendidikan Ekonomi, Manajemen Dan Keuangan*, 4(1), 67–76. <https://doi.org/10.26740/jpeka.v4n1.p67-76>.
- Yulandari, Y., & Mustika, D. (2021). Pengembangan Handout Tematik Berbasis Model Inkuiri di Sekolah Dasar. *Jurnal Basicedu*, 5(3), 1418–1426. <https://doi.org/https://doi.org/10.31004/basicedu.v5i3.935>.