Development of Flipbook Media Incorporating Responsibility Values for Elementary School Students

Ira Rahmawati, Elan*, Erwin Rahayu Saputra

Elementary School Teacher Education Program, Universitas Pendidikan Indonesia.
*Corresponding Author. Email: elanmpd@upi.edu

Abstract: This study aims to design and develop flipbook media that incorporates responsibility values for elementary school students. The study utilized the Design-Based Research (DBR) approach, employing the Reeves model, which consists of four key phases: problem identification and analysis, prototype development, iterative testing and refinement, and reflective evaluation. The study involved fourth-grade students and teachers from elementary schools in Tasikmalaya Regency, West Java, as well as four expert validators specializing in subject content, character education, educational media, and pedagogy. Data were collected through various methods, including observation, interviews, document analysis, questionnaires, and expert evaluations. Both qualitative and quantitative approaches were applied in analyzing the data. The results revealed that the flipbook media incorporating responsibility values is deemed highly appropriate for use in the educational process. Expert evaluations showed that the flipbook media scored high in terms of feasibility, with scores ranging from 75% to 94.90%. The flipbook media was designed with various engaging features, such as videos, games, and visual displays, to foster an active and interactive learning atmosphere.

Introduction

Technological advances in the Industry 4.0 era have significantly transformed many aspects of life, including education. According to Lase (2019), this is marked by rapid technological growth in human life, including the Indonesian education system. The curriculum, the role of educators, and advances in ICT-based educational technology are all influenced by these developments. In line with these changes, Mulyani (2021) states that technology is increasingly facilitating various learning activities. In addition to making information more accessible, technology also supports the implementation of learning activities by creating a more interactive and efficient learning environment. Thus, with the rapid advancement of technology, the field of education now has many opportunities to develop and innovate.

The improvement of education quality is strongly influenced by how teachers perform their roles in guiding students and creating a conducive learning environment (Namri, 2025). One key to successful learning activities is the use of technology-based instructional media, which aims to foster more active communication and discussion (Anam, 2021). Instructional media serves as a channel that connects information between educators and students. Furthermore, media is essential in the learning process to enhance efficiency and provide greater benefits when the Feasible media is used (Harsiwi, 2020). Therefore, the development of creative and innovative learning media is crucial to achieving educational goals. One type of digital media that can be utilized is the flipbook.

A flipbook is a digital book that can be developed as effectively and attractively as possible to increase students' learning interest and facilitate understanding of the material during the learning process (Masithoh, 2022). Flipbooks offer many advantages, one of which is presenting learning content through engaging text, images, and illustrations, with an easy creation process and low production costs (Novitasari, 2023). Flipbook media has the potential to be further developed by embedding subject matter, images, and videos, as well as adding audio effects. It also helps students better understand the material through features such as quizzes, concept maps, summaries, and practice questions (Setiadi, 2021). Research by Dewi (2024) has demonstrated the effectiveness of flipbook media as a learning tool in improving students' academic achievement and the quality of the learning process. Similarly, findings from Febriyanti (2022) show that flipbook media can increase student engagement, including collaboration, expressing opinions, and participating in discussions. Therefore, with its visual appeal and interactive features, flipbook media can be a viable learning tool to enhance students' learning motivation. Flipbook design can also be tailored to align with instructional content and learning objectives outlined in the curriculum.

The research gap indicates a need for flipbook media specifically designed to enhance students' interest and engagement by integrating interactive features tailored to their needs. The novelty of this study lies in the development of a flipbook that incorporates videos, educational games, and responsibility character values, all aligned with learning based on the Merdeka Curriculum.

In the context of *Pancasila* Education within the *Merdeka Curriculum*, the use of interactive and relevant media can support the delivery of material on rights and obligations, with an emphasis on shaping students' moral character. The integration of technology into learning can address challenges while also enhancing student engagement, especially in subjects that require logical approaches. This aligns with research by Fitriya (2024), which found that the use of interactive digital media in *Pancasila* Education at the elementary level can increase students' enthusiasm and motivation to learn, as the media used is more appealing and easier to understand. *Pancasila* Education aims to shape or transform individuals' ways of thinking and behaving. Today's younger generation is facing a moral crisis, losing moral values due to both internal and external influences (Lestari, 2022). Ardiawan (2020) emphasizes that students aspire to become responsible citizens who understand and fully comply with their rights and obligations. The realization of these rights and obligations requires a planned and systematic effort aimed at sustaining life, improving national and societal well-being, advancing public intelligence, and building national identity and morality. In reality, however, rights violations frequently occur in schools and can harm students (Ramadhani, 2021). Schools should be safe and enjoyable environments, yet often become places of fear and concern due to such violations. Therefore, when studying the topic of rights and obligations, it is crucial to create a positive and engaging learning environment. This not only supports comprehension but also fosters a sense of responsibility in students. This view is in line with Piaget's theory, which states that children aged 7 to 11 are in a developmental stage where they begin to think logically but still require concrete experiences to grasp abstract concepts (Lubis, 2020).

Based on preliminary research data, it was found that digital media has been used in *Pancasila* education lessons on the topic of rights and obligations as school citizens. However, the media used was not effective in encouraging active student engagement, making the learning activities tend to be passive, even when carried out in groups. In addition, students' low sense of responsibility was observed from their lack of seriousness in completing tasks and their preference for chatting with peers. This study is designed to create

an educational flipbook that incorporates the value of responsibility for elementary school students. The flipbook aims to enhance Pancasila Education, particularly regarding the rights and duties of school community members, and to assist in cultivating students' sense of responsibility.

Research Method

This study employed Design-Based Research (DBR) methodology following the Reeves model (as cited in Evi, 2025). The development process comprises four stages: 1) Identifying and analyzing problems in the field through interviews with fourth-grade teachers and observations conducted during *Pancasila* Education lessons on the topic of rights and obligations as school citizens in the fourth grade. 2) Developing a prototype by determining the concept and designing the flipbook media to be developed based on the problems identified together with the fourth-grade teachers. 3) Conducting iterative cycles to test and improve the solution. At this stage, the designed product is evaluated for feasibility by validators (expert judgement). After receiving feedback from the validators, revisions are made, and the product is then trialed with students to assess its feasibility when used in learning. 4) Reflection, where the trial results are reviewed to identify the strengths and weaknesses of the media, thereby considering further development to better meet students' learning needs.

The subjects of this study involved fourth-grade teachers from SDN Sindangrasa and SDN 2 Sukamaju, Tasikmalaya Regency, West Java Province. In addition, four expert validators (expert judgement) participated, consisting of content experts, character value experts, media experts who are lecturers at the Indonesia University of Education Tasikmalaya Campus, and pedagogic experts who are fourth-grade elementary school teachers with a Bachelor's degree in Elementary School Teacher Education.

This study gathers data through several methods: observation, interviews, document analysis, expert evaluations, and questionnaires. To analyze qualitative data, it uses the Miles and Huberman model (Sugiyono, 2022), which involves condensing the data by summarizing and selecting key information, organizing it systematically, and then drawing conclusions. Meanwhile, quantitative data analysis is conducted by processing and evaluating information collected from expert judgement assessments and questionnaires given to students. This calculation is assisted by using Excel. The criteria for evaluating feasibility based on expert judgement scores are as follows:

Table 1. **Criteria for Expert Judgement Validation Calculation**

Score	Criteria
4	Very Good
3	Good
2	Less Good
1	Not Good

Adapted from (Sugiyono, 2022)

To analyze the validation questionnaires from experts (expert judgement), as well as the responses from students and teachers regarding the feasibility of the developed product, the calculation is performed using the following formula:

$$Product\ Score = \frac{Total\ Score\ Obtained}{Maximum\ Score} \times 100\%$$

The final score calculated from the formula is then interpreted according to the following criteria:

Tabel 2. Feasibility Interpretation

Level of Achievement	Criteria
76%-100%	Very Feasible
51%-75%	Feasible
26%-50%	Less Feasible
0%-25%	Not Feasible

Modified from (Fernanda, 2023)

Results and Discussion

This research focuses on developing of flipbook media incorporating responsibility values for elementary school students. The research findings are presented as follows.

Identification and Problem Analysis

Interviews with fourth-grade teachers revealed that the Merdeka Curriculum has been implemented in some, but not all, classes, particularly in grade IV; however, not all classes have applied it yet. During the learning process, The primary instructional methods employed were lectures and Q&A sessions, assisted by media that were considered less interactive. Teachers consider the use of media in the learning process to be highly significant, particularly when teaching the topic of rights and responsibilities as school members, since this concept tends to be abstract. This perspective is supported by Wulandari (2024), who highlights that learning media plays a vital role in ensuring the effectiveness of the learning process. Similarly, Imanulhaq (2022) emphasizes that media is especially important at this stage because students still rely on concrete representations to grasp new ideas. The use of media can also boost engagement, spark motivation, and positively influence students' psychological readiness for learning. Moreover, although both schools have made efforts to instill character values-especially responsibility-some students have not yet fully shown this trait in practice.

Needs Analysis

This stage begins with analyzing the learning media needs used by teachers (Syifa, 2021). Generally, the media already employed in schools is considered capable of meeting students' needs to facilitate learning activities. However, upon further analysis, there are still several important elements that have not been fully addressed. Student participation in learning activities remains an unmet need. Besides student engagement, another unmet need in the media is the lack of integration of the character value of responsibility within the learning media. The media explicitly does not yet direct students to apply responsible attitudes in their daily lives. Therefore, developing more interactive and contextual media is necessary so that students are engaged during the learning process and gain a deeper understanding while applying the character of responsibility in everyday life. This aligns with Huda (2020) opinion that utilizing information technology can enhance the learning process by integrating it. Budiyono (2020) also states that the use of digital technology provides positive benefits to the learning process. Consequently, this technology functions as a beneficial tool in the field of education, helping educators create learning experiences that are both more engaging and more effective.

The material needs for developing flipbook media containing the character value of responsibility are as follows:

Table 3. Material Identity

Main Material	Subtopics
Rights and Obligations as School Citizens	1. Definition of rights and and obligations 2. Examples of acquiring rights and fulfilling obligations 3. Examples of acquiring rights as school citizens

4. Examples of fulfilling rights as school citizens
5. Balance between rights and obligations

Developing the Prototype

This stage focuses on designing the development of an educational flipbook that integrates the character value of responsibility as a learning medium. The steps involved in the media development process are as follows:

Creating a Flipbook Design Using Canva

The initial step in creating the flipbook media is designing the layout, including the colors, elements, and dimensions needed. The researcher began by selecting a blank template and setting the Feasible size. Next, suitable colors and visual elements were chosen.
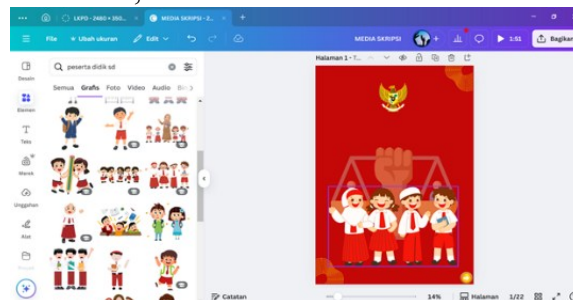

Figure 1. Flipbook Cover Design Display in Canva

Figure 1 shows the process of selecting the cover design by choosing red as the main color. Additionally, the researcher selected decorative elements such as a rectangular line with a curved edge on the right side, an arrow graphic, an animated image of the Garuda bird, an animation representing the balance of rights and obligations, and an animation of students. The choice of colors and animations was made by considering their relevance to the material, the subject matter, and the attractiveness of the flipbook's appearance.

Figure 2. Adding Flipbook Identity

Next, in Figure 2, the flipbook identity was added, including the subject name, title, material, grade level, author's name, and a logo representing the author's educational institution. Additionally, a yellow background was added to several text sections to enhance readability for users.
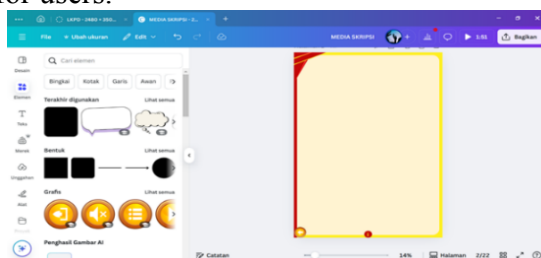

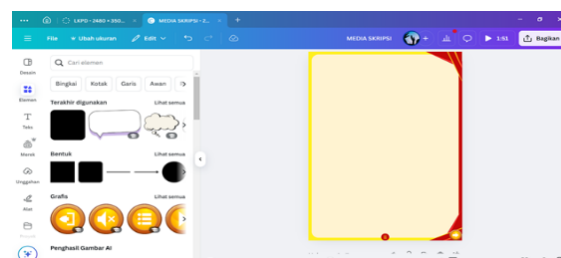**Figure 3. Initial Content Display of Flipbook on the Left Slide**

Figure 3. Initial Content Display of Flipbook on the Right Slide

In Figures 3 and 4, the initial content display of the flipbook uses a nude pink color as the base background. For the left slide, the top-right and bottom borders use yellow, while the

left border uses red. Meanwhile, for the right slide, the top-left and bottom borders use yellow, and the right border uses red. These colors were chosen with variation to make the flipbook more visually appealing and to avoid a dull appearance.
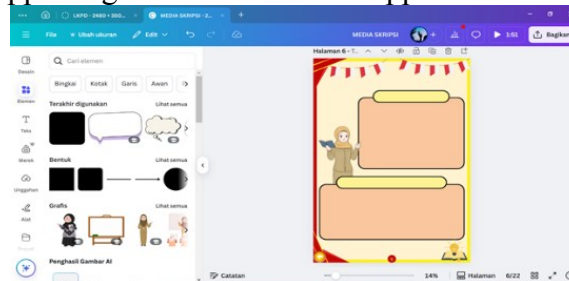

Figure 5. Addition of Text Boxes and Animations

Figure 5 shows the process of adding text boxes and animations. The selection of boxes was adjusted according to the needs of the text or animations to be placed on each page of the flipbook, such as the title, subtitle, introduction, table of contents, usage instructions, learning achievements, learning objectives, the Pancasila student profile, learning material, and the author's identity.
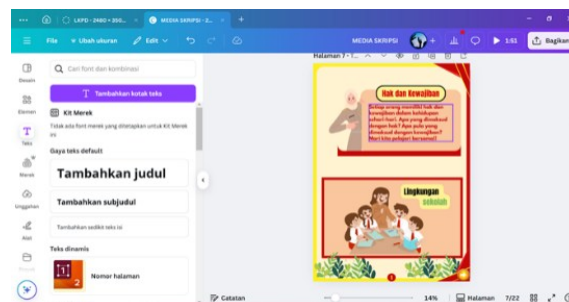

Figure 6. Addition of Learning Content

In Figure 6, the learning content was added to the previously created text boxes, both in the form of text and animations as visual examples of the material. The text size was adjusted as needed, and the font style chosen was League Spartan. This was done to ensure the text was easy to read, with clear visibility and not too small in size so users could read it easily. The animations were selected based on their function, such as decorating empty spaces in the flipbook and clarifying material examples to make them more attractive and easier to understand.

Integrating the Flipbook Design from Canva into the Heyzine Webiste

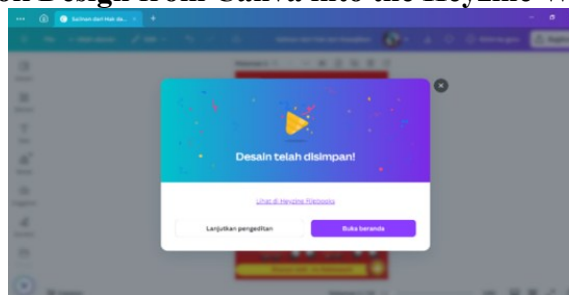**Figure 7. Integrating Flipbook into the Heyzine Website**

After completing the design process, the next step is to integrate the flipbook created on Canva into the Heyzine website. This is done by clicking "Share," then selecting "Download" as a PDF file. Afterward, go to the Heyzine website by searching https://heyzine.com/ and logging in via the homepage using a Google account. Once signed in, go to the dashboard and

click "Upload File" to upload the previously designed PDF from Canva. The uploaded file will automatically appear as a flipbook display.

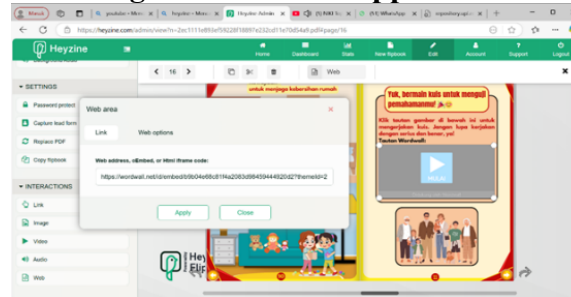**Adding Games and Videos Using the Wordwall Application**

Figure 8. Adding Wordwall Games Feature

After accessing the Heyzine page, a Wordwall game is added as a quiz related to the lesson material. The game is added through the leftmost bottom menu bar by selecting the "Web" option. Then, paste the game link that has been created on the Wordwall website at https://wordwall.net/id/create/picktemplate/ according to the instructional needs. The game will automatically appear in the flipbook.
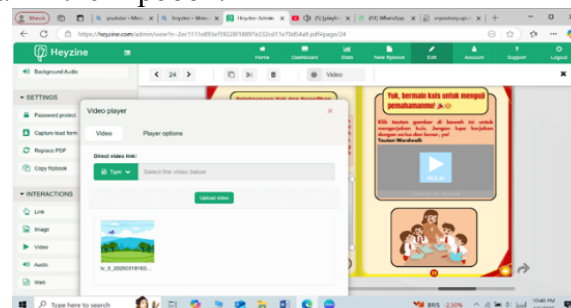

Figure 9. Adding Video to the Flipbook

To enhance the flipbook with video examples of the implementation of rights and obligations as school citizens, as well as the practice of responsibility, a YouTube video edited using the CapCut application is added. The video is embedded by selecting the "Video Player" menu, and it will automatically appear on the flipbook page.

Conducting Iterative Processes to Practically Test and Refine Solutions

The developed media, once ready to be used in the learning process, must first be validated by experts (Sari, 2023). Therefore, in this study, expert validation (expert judgment) was conducted to obtain assessments, input, and suggestions. The results of the validation are presented as follows:

Table 4. Validation Results by Subject Matter Expert

Aspect	Precentage	Criteria
Content Accuracy	75%	Feasible
Relevance to Objectives	75%	Feasible
Depth and Completeness of Material	75%	Feasible
Varied Presentation	75%	Feasible
Information Integration	75%	Feasible
Language	75%	Feasible
Responsibility Character Value	75%	Feasible
Evaluation	75%	Feasible
Average	**75%**	**"Feasible"**

According to the evaluation conducted by the subject matter expert, as presented in Table 4, the content of the flipbook media achieved a score of 75%, indicating that it is considered

"Feasible" for implementation in the learning process. However, some deficiencies were identified, and revisions were suggested by the expert validator. The suggested revisions include aligning the material examples with the "7 Habits of Excellent Indonesian Children" and adding critical thinking questions within the material. This is in line with (Sari, 2021), who states that if a validation result is deemed insufficiently Feasible, it must be revised until it meets the required standards.

Table 5. Validation Results by Character Value Expert

Aspect	Percentage	Criteria
Content Accuracy	91,66%	Very Feasible
Depth and Completeness of Material	87,5%	Very Feasible
Potential to Foster Responsibility Character	100%	Very Feasible
Rata-rata	**93,05%**	**"Very Feasible"**

Based on the assessment by the character value expert as shown in Table 5, the media obtained a score of 93.05%, categorized as "Very Feasible" for use in learning activities without requiring revisions.

Table 6. **Validation Results by Media Expert**

Aspect	Percentage	Criteria
Design and Layout	75%	Feasible
Emphasis of Information	75%	Feasible
Design Consistency	62,5%	Feasible
Language	91,66%	Very Feasible
Media Usability	100%	Very Feasible
Rata-rata	**80,83%**	**"Very Feasible"**

Based on the media expert's assessment in Table 6, the flipbook media received a score of 80.83%, categorized as "Very Feasible" and thus suitable for use in the learning process. This aligns with Ruhiat (2023)who stated that flipbooks are Feasible, appealing, easy to use, and easy to understand, making them suitable for educational media. However, some improvements are still needed. The expert suggested revisions such as more consistent font usage, resizing image animations for better proportionality (e.g., larger image of the mother compared to the teacher), avoiding overly bright font colors, and using the term "acquisition of rights" instead of "exercise of rights".

Table 6. **Validation Results by Pedagogical Expert**

Aspek	Percentage	Kriteria
Content Accuracy	91,66%	Very Feasible
Depth and Completeness of Material	87,5%	Very Feasible
Suitability to Student Characteristics	100%	Very Feasible
Language	83,33%	Very Feasible
Varied Presentation	100%	Very Feasible
Integration of Text and Images	100%	Very Feasible
Media Usability	91,66%	Very Feasible
Potential to Foster Student Character	100%	Very Feasible
Accuracy in Choosing Learning Media	100%	Very Feasible
Average	**94,90%**	**"Very Feasible"**

The assessment from the pedagogical expert in Table 7 shows that the flipbook media earned a score of 94.90%, categorized as "Very Feasible" and ready to be used in the learning process without any need for revisions.

Based on the overall assessment results from validators (expert judgement), the educational flipbook media embedded with the character of responsibility is considered highly feasible for use in the learning process. This is evidenced by the average expert score

of 85.94%, which falls under the " Very Feasible " category. This finding is in line with the study by Gusti (2023), which concluded that flipbooks are Feasible media for learning activities, receiving an excellent qualification. Similarly, (Amani, 2024) also found that flipbooks are highly suitable for classroom use due to their appealing design, ease of use, and ability to reduce students' boredom.

The flipbook media has been shown to be highly effective for teaching Pancasila Education, particularly in delivering material on rights and responsibilities to fourth-grade elementary students. Instructional media play a crucial role in the educational process, as they help facilitate learning activities (Apriliani, 2021). These tools enhance students' motivation and engagement, making the learning environment more dynamic and enjoyable (Setiyani, 2020). Among the many available media types, the flipbook that incorporates the value of responsibility is especially well-suited to the demands of modern education. It is user-friendly, technologically relevant, and capable of capturing students' attention. The creation of this flipbook responds to the needs of the digital age by offering an interactive, accessible, and appealing learning resource. Additionally, it is designed to enhance the quality of learning by promoting the development of a sense of responsibility in students.

This research strengthens the notion that technology-based media supports interactive learning and character development while enriching students' knowledge. Furthermore, this flipbook facilitates teachers in delivering lessons on rights and obligations as school citizens in a more engaging way, increases student involvement, and can be easily adapted for use in other subjects-encouraging innovation in teaching in the digital era.

Conclusion

This study concludes that the flipbook media incorporating the character of responsibility is Very Feasible for classroom use. The validation results from material experts scored 75% (Feasible), character experts 93.05% (Very Feasible), media experts 80.83% (Very Feasible), and pedagogical experts 94.90% (Very Feasible). The flipbook is designed with various engaging features such as videos, games, and visual displays that promote an active and interactive learning atmosphere.

Recommendation

Based on the findings, the researcher offers several recommendations. Teachers should receive training that motivates them to develop creative and innovative learning media to enhance student engagement. Furthermore, this research is intended to provide a valuable reference for future scholars aiming to develop or enhance educational flipbooks that incorporate the character value of responsibility.

References

Amani, F. I., Bahar, A., Widagdo, A. K., & Sulandari, L. (2024). Pengembangan Media Pembelajaran Flipbook Berbasis Kontekstual pada Materi Keselamatan Kerja. *Jurnal Ilmiah Profesi Pendidikan*, *9*(3), 1631–1636. https://doi.org/10.29303/jipp.v9i3.2429

Anam, K., Mulasi, S., & Rohana, S. (2021). Efektifitas Penggunaan Media Digital dalam Proses Belajar Mengajar. *Genderang Asa: Journal of Primary Education*, *2*(2), 76–87. https://doi.org/10.47766/ga.v2i2.161

Apriliani, M. A., Maksum, A., Wardhani, P. A., Yuniar, S., & Setyowati, S. (2021). Pengembangan media pembelajaran PPKn SD berbasis Powtoon untuk mengembangkan karakter tanggung jawab. *Jurnal Ilmiah Pendidikan Dasar*, *8*(2), 129. https://doi.org/10.30659/pendas.8.2.129-145

Ardiawan, I. K. N., Kristiana, P. D., & Swarjana, I. G. T. (2020). Model Pembelajaran Jigsaw Sebagai Salah Satu Strategi Pembelajaran PKn di Sekolah Dasar. *Jurnal Pendidikan Dasar*, *1*(1), 57–63.

Budiyono, B. (2020). Inovasi Pemanfaatan Teknologi Sebagai Media Pembelajaran di Era Revolusi 4.0. *Jurnal Kependidikan: Jurnal Hasil Penelitian Dan Kajian Kepustakaan Di Bidang Pendidikan, Pengajaran Dan Pembelajaran*, *6*(2), 300. https://doi.org/10.33394/jk.v6i2.2475

Dewi, I. M., & Setyasto, N. (2024). Pengembangan Media Pembelajaran Digital Flipbook Berbasis Canva Pada Mata Pelajaran IPAS Materi Sistem Pernapasan Kelas V di Sekolah Dasar. *Jurnal Penelitian Pendidikan IPA*, *10*(5), 2300–2308. https://doi.org/10.29303/jppipa.v10i5.7030

Evi, A. S. . (2025). *Pengembangan Model Manajemen Rekrutmen dan Seleksi Peserta Didik Madrasah Aliyah Negeri di Provinsi Lampung. UIN Raden Intan Lampung.*

Febriyanti*, E., & Mayarni, M. (2022). Pengaruh Strategi Pembelajaran Aktif Tipe Crossword Puzzle Berbantuan Media Flipbook Terhadap Keaktifan Belajar IPA Siswa Kelas IV Sekolah Dasar. *Jurnal Pendidikan Sains Indonesia*, *10*(4), 816–832. https://doi.org/10.24815/jpsi.v10i4.26281

Fernanda, A. B., & Ahmadi, F. (2023). *PENGEMBANGAN MEDIA PEMBELAJARAN TEKAGA BERBASIS CONSTRUT 2 MUPEL IPAS KELAS IV SDN BUTUH 1 SAWANGAN. 6*, 167–176.

Fitriya, A. P., Rahmawati, N. D., Saadah, K., & Siswanto, J. (2024). Pemanfaatan Multimedia Interaktif Sebagai Inovasi Media Pembelajaran Berbasis Teknologi Pada Pembelajaran Pendidikan Pancasila Kelas Iv Sekolah Dasar. *NUSRA: Jurnal Penelitian Dan Ilmu Pendidikan*, *5*(3), 1516.

Gusti Ayu Made Mia Arshandi I Made Citra Wibawa, K. Y. (2023). Flipbook: Media Pembelajaran Interaktif Untuk Meningkatkan Kognitif IPA Siswa Sekolah Dasar. *MIMBAR PGSD Undiksha*, *11*(1), 165–174. https://doi.org/10.23887/jjpgsd.v11i1.55034

Harsiwi, U. B., & Arini, L. D. D. (2020). Pengaruh Pembelajaran Menggunakan Media Pembelajaran Interaktif terhadap Hasil Belajar siswa di Sekolah Dasar. *Jurnal Basicedu*, *4*(4), 1104–1113. https://doi.org/10.31004/basicedu.v4i4.505

Huda, I. A. (2020). Perkembangan Teknologi Informasi Dan Komunikasi (Tik) Terhadap Kualitas Pembelajaran Di Sekolah Dasar. *Jurnal Pendidikan Dan Konseling (JPDK)*, *2*(1), 121–125. https://doi.org/10.31004/jpdk.v1i2.622

Imanulhaq, R., & Ichsan, I. (2022). Analisis Teori Perkembangan Kognitif Piaget Pada Tahap Anak Usia Operasional Konkret 7-12 Tahun Sebagai Dasar Kebutuhan Media Pembelajaran. *Waniambey: Journal of Islamic Education*, *3*(2), 126–134. https://doi.org/10.53837/waniambey.v3i2.174

Lase, D. (2019). Pendidikan di Era Revolusi Industri 4.0. *SUNDERMANN: Jurnal Ilmiah Teologi, Pendidikan, Sains, Humaniora Dan Kebudayaan*, *12*(2), 28–43. https://doi.org/10.36588/sundermann.v1i1.18

Lestari, S. O., & Kurnia, H. (2022). Peran Pendidikan Pancasila dalam pembentukan karakter. *Jurnal Citizenship: Media Publikasi Pendidikan Pancasila Dan Kewarganegaraan*, *5*(1), 25. https://doi.org/10.12928/citizenship.v5i2.23179

Lubis, M. A. (2020). *PEMBELAJARAN PENDIDIKAN PANCASILA DAN KEWARGANEGARAAN (PPKn) di SD/MI Peluang dan Tantangan di Era Industri 4.0* (L. K. Maulana Arafat Lubis, Irfan Fahmi, Pirlo (ed.); 1st ed.). KENCANA.

Masithoh, A. (2022). Pengaruh Model Pembelajaran Jigsaw Menggunakan Media Flipbook

Terhadap Hasil Belajar IPS Kelas V SD. *Jurnal BELAINDIKA (Pembelajaran Dan Inovasi Pendidikan)*, *4*(1), 21–27. https://doi.org/10.52005/belaindika.v4i1.80

Mulyani F, & Haliza N. (2021). Analisis Perkembangan Ilmu Pengetahuan dan Teknologi (Iptek) Dalam Pendidikan. *Jurnal Pendidikan Dan Konseling (Jpdk)*, *3*(1), 101–109.

Namri, A. I., Kurniadi, W., & Suhardi, S. (2025). *Pengembangan Media Pembelajaran Interaktif Sistem Organ Tubuh Manusia*. 37–47.

Novitasari, D., Listiani, I., & Prasasti, P. A. T. (2023). Efektivitas Media Pembelajaran Flipbook Terhadap Keterampilan Menulis Narasi Kelas V Sekolah Dasar. *Al-Madrasah: Jurnal Pendidikan Madrasah Ibtidaiyah*, *7*(4), 1586. https://doi.org/10.35931/am.v7i4.2617

Ramadhani, D. (2021). Pelanggaran Hak Asasi Manusia Dalam Kegiatan Sekolah. *De Cive : Jurnal Penelitian Pendidikan Pancasila Dan Kewarganegaraan*, *1*(10), 383–390. https://doi.org/10.56393/decive.v1i10.526

Ruhiat, Y. (2023). Media Pembelajaran Booklet Berbasis Flipbook pada Materi Aircraft Instrument System. *Jurnal Ilmiah Pendidikan Profesi Guru*, *6*, 399–409.

Sari, R. K., & Harjono, N. (2021). *Pengembangan Media Pembelajaran Interaktif Berbasis Articulate Storyline Tematik Terhadap Minat Belajar Siswa Kelas 4 SD*. *4*(1), 122–130.

Sari, T. N., Hidayat, S., & Nuryadin, A. (2023). Pengembangan E-Modul Pertolongan Pertama Pada Kecelakaan (P3K) Bermuatan Karakter Peduli Sosial Untuk Pramuka Penggalang di SD. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, *08*(02), 5574–5587.

Setiadi, M. I., Muksar, M., & Suprianti, D. (2021). Penggunaan Media Pembelajaran Flipbook Untuk Meningkatkan Aktivitas Dan Hasil Belajar Siswa. *JISIP (Jurnal Ilmu Sosial Dan Pendidikan)*, *5*(4), 1067–1075. https://doi.org/10.58258/jisip.v5i4.2542

Setiyani, Putri, D. P., Ferdianto, F., & Fauji, S. H. (2020). Designing a digital teaching module based on mathematical communication in relation and function. *Journal on Mathematics Education*, *11*(2), 223–236. https://doi.org/10.22342/jme.11.2.7320.223-236

Sugiyono. (2022). *METODE PENELITIAN Kuantitatif, Kualitatif, dan R&D* (2nd ed.). ALFABETA.

Syifa Dwi Hendrianti, Sholeh Hidayat, S. (2021). Jurnal Teknologi Pendidikan. *Jurnal Teknologi Pendidikan (JTP)*, *6*(2), 178–184. https://doi.org/10.24114/jtp.v8i2.3329

Wulandari, T., D.P, G. N., Kurniawan, Y., Ariyani, D., & Arif, M. S. (2024). Pengembangan Media Pembelajaran Interaktif Berbasis Website Menggunakan Google Sites Pada Materi Hak Dan Kewajiban Kelas 3 Sd. *Cendikia Jurnal Pendidikan Dan Pengajaran*, *1206*, 262–265.