

Design and Development of Interactive E-Book Learning Media Using Heyzine Flipbook on Prayer Materials: A Study of Validity, Practicality, and Effectiveness

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Abstrak

Penelitian ini bertujuan mengembangkan media pembelajaran berupa E-Book interaktif berbasis Heyzine Flipbook pada materi sholat serta menguji validitas, praktikalitas, dan efektivitasnya. Metode penelitian menggunakan pendekatan Research and Development (R&D) dengan model ADDIE (Analysis, Design, Development, Implementation, Evaluation). Hasil validasi ahli menunjukkan bahwa media dinyatakan sangat valid, uji kepraktisan melalui respon guru dan peserta didik menunjukkan media sangat praktis, serta uji efektivitas melalui hasil belajar memperlihatkan peningkatan signifikan sehingga media ini efektif digunakan dalam pembelajaran Pendidikan Agama Islam. Dengan demikian, Heyzine Flipbook dapat menjadi alternatif media inovatif untuk meningkatkan pemahaman dan keterampilan siswa dalam praktik sholat.

Kata kunci : Media pembelajaran, E-Book Interaktif, Heyzine Flipbook, Sholat, ADDIE.

Abstract

This study aims to develop interactive e-book learning media based on Heyzine Flipbook on prayer materials and to examine its validity, practicality, and effectiveness. The research employed a Research and Development (R&D) approach using the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation). Expert validation results indicated that the media was categorized as highly valid. Practicality testing through teacher and student responses demonstrated that the media was highly practical. Furthermore, the effectiveness test based on learning outcomes showed a significant improvement, indicating that the media was effective in Islamic Religious Education learning. Therefore, Heyzine Flipbook can serve as an innovative alternative medium to enhance students' understanding and skills in performing prayer.

Keywords: Learning Media, Interactive E-Book, Heyzine Flipbook, Prayer, ADDIE.

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INTRODUCTION

Islamic Religious Education (PAI) in madrasahs faces a dual challenge: ensuring that the transfer of religious knowledge takes place accurately and meaningfully, while simultaneously bridging the practical skills of worship so that they are performed correctly, orderly, and consistently. At the junior secondary level, such as at MTs Al-Hidayah Tanjungjaya, Central Lampung, the competence of prayer practice often becomes a concrete indicator of learning success because it involves cognitive dimensions (knowledge of pillars and recitations), psychomotor dimensions (sequence and accuracy of movements), and affective dimensions (devotion and etiquette). The dynamics of students who are familiar with mobile devices and multimedia content make lecture-centered teaching strategies less adequate; teachers require a medium that can “show,” “guide,” and “invite practice” repeatedly without being constrained by space and time. In this context, the use of interactive e-book media based on Heyzine Flipbook becomes highly relevant, as it allows the integration of text, sequential images, audio recitations, and video demonstrations of prayer movements into a unified learning experience accessible across devices. Its fundamental principle aligns with multimedia learning theory: when words and images are deliberately designed, cognitive load is better managed and retention increases a finding consistently supported across procedural and conceptual learning domains¹.

This pedagogical need is further emphasized by the relatively limited instructional time for PAI in many madrasahs and the heterogeneity of students' prior abilities. The teaching of prayer practice requires step-by-step demonstration, expert modeling, and repeated training with timely feedback². Research on procedural skills learning (e.g., clinical training) consistently shows that instructional videos designed according to multimedia principles significantly enhance motor performance, particularly when combined with self-regulated

¹ Mayer, R. E. (2020). *Multimedia learning* (3rd ed.). Cambridge University Press.

² Srinivasa, K., Chen, Y., & Henning, M. A. (2020). The role of online videos in teaching procedural skills to postgraduate medical learners: A systematic narrative review. *Medical Teacher*, 42(6), 689–697.

learning and repeated practice opportunities. This reinforces the rationale that the video component in a flipbook alongside text and images is not a mere complement, but rather a key element in facilitating the formation of correct action schemas in procedural tasks such as prayer movements³.

Technically, Heyzine Flipbook provides the features teachers need to embed YouTube videos (e.g., examples of *takbiratul ihram* or *sujud* according to Islamic guidance), audio (recitations of prayer read in proper *tajwid*), links (to form-based evaluations), and page navigation that resembles a real book. Teachers can start with existing PDF prayer materials, then embed multimedia elements using Heyzine's editor so that each pillar/movement appears as a sequential microlearning unit. For students at MTs Al-Hidayah Tanjungjaya, this access enables repeated learning at home with parents/guardians, while also providing teachers with channels for formative assessment through embedded forms (e.g., checking comprehension of pillars, sequences, and recitations). Practically, this expands the scope of learning beyond the classroom and compensates for the limitations of face-to-face practice sessions.

Theoretically, such media design is grounded in the principles of segmentation, signaling, modality, and redundancy in multimedia learning. Segmentation breaking down prayer material into short units such as *niat*, *takbir*, *ruku'*, *i'tidal*, and *sujud* helps manage cognitive load. Signaling through icons/arrows on movement illustrations directs attention to critical aspects⁴. The modality principle combines visual channels (movement illustrations) and auditory channels (recitation audio) to maximize working memory capacity. Avoiding redundancy (e.g., not presenting long texts identical to narrated audio) prevents overload. Syntheses of research in this field from multimedia learning handbooks to

³ Peyton's four-step model & skills training evidence synthesis (2024). *Teaching Procedural Skills: Integrating educational theory into practice. Advances in Medical Education and Practice / BMC*

⁴ Bond, M., Buntins, K., Bedenlier, S., Zawacki-Richter, O., & Kerres, M. (2020). Mapping research in student engagement and educational technology in higher education: A systematic evidence map. *International Journal of Educational Technology in Higher Education*, 17(2). <https://doi.org/10.1186/s41239-019-0176-8>

instructional video studies provide empirical justification for these design decisions⁵.

Recent evidence further suggests that interactive e-books outperform non-interactive formats, especially when they present activities or feedback that stimulate students' cognitive engagement. A meta-analysis in open and distance education confirmed that interactive elements in e-books exert a stronger impact on learning outcomes compared to static versions, although effects on reading skills are less consistent indicating that the type of targeted competence influences the magnitude of benefit. This aligns with the hypothesis that procedural/psychomotor content such as prayer stands to gain greater benefits, given its reliance on visualized sequences and repetitive practice⁶.

Despite these insights, most prior studies remain focused on digital media in religious education broadly, such as the use of e-learning, mobile applications, or video-based platforms. Few specifically examine the effectiveness of interactive flipbooks for worship practices like prayer. This creates a significant research gap: the absence of comprehensive studies on how interactive flipbooks can simultaneously support students' understanding of prayer movements and recitations, and address the limitations of conventional methods that are often monotonous and lack interactivity⁷.

The novelty of this study lies in the exploration of Heyzine Flipbook as interactive learning media in the context of prayer practice an area seldom addressed in prior research⁸. This approach integrates the visualization of prayer movements, recitation texts, and interactive multimedia into a more comprehensive

⁵ Fiorella, L., & Mayer, R. E. (2020/2021). What works and doesn't work with instructional video. *Computers in Human Behavior*, 115, 106613. <https://doi.org/10.1016/j.chb.2020.106613>

⁶ International Review of Research in Open and Distributed Learning (2025). *Which is better: E-book or printed book? A meta-analysis of educational materials*

⁷ Bond, M., Buntins, K., Bedenlier, S., Zawacki-Richter, O., & Kerres, M. (2020). Mapping research in student engagement and educational technology in higher education: A systematic evidence map. *International Journal of Educational Technology in Higher Education*, 17(2). <https://doi.org/10.1186/s41239-019-0176-8>

⁸ Aljabri, S., & Hussain, F. (2023). Blended approaches in Islamic education: Challenges and opportunities in the 21st century. *International Journal of Instruction*, 16(2), 123–140. <https://doi.org/10.29333/iji.2023.1627a>

learning experience than either printed materials or simple digital media⁹. Moreover, interactive flipbooks are more accessible and easier to implement compared to advanced technologies such as AR or VR, which require specialized devices, making them more inclusive for schools and madrasahs with limited facilities. Thus, this study contributes not only academically by filling a gap in the literature on digital media for practical religious education but also practically by offering educators a feasible tool to enhance the quality of Islamic instruction in the digital era¹⁰.

In summary, the research gap addressed is the lack of development and evaluation studies on interactive flipbook-based e-books specifically targeting prayer practice at the madrasah level, with thorough testing of validity, practicality, and effectiveness. The novelty of this study lies in: (1) the integration of Heyzine Flipbook as media uniting texts, sequential images, audio recitations, and video demonstrations into segmented microlearning pathways; (2) an instructional design explicitly adopting multimedia learning principles (segmentation, signaling, modality, minimal redundancy) for procedural worship tasks; and (3) a blended implementation scheme contextualized to device availability in madrasahs, enabling structured self-learning at home alongside guided formative assessments. Within this framework, the study at MTs Al-Hidayah Tanjungjaya is expected to provide empirical evidence that interactive e-books are not only feasible and engaging, but also effective in improving students' accuracy of prayer sequences, correctness of recitations, and devotion (*khusyuk*) while remaining realistic in terms of teacher readiness and school infrastructure¹¹.

⁹ Al-Khalifa, H. S., & Garcia, R. (2021). The role of Islamic education in fostering moral values in the digital age. *Journal of Moral Education*, 50(3), 295–310. <https://doi.org/10.1080/03057240.2020.1854019>

¹⁰ Anshori, M., & Rahman, F. (2022). Teachers' role in moral education in Muslim contexts: Navigating challenges of globalization. *Religions*, 13(11), 1062. <https://doi.org/10.3390/rel13111062>

¹¹ Neuwirth, L. S., Ng, S., Devors, S., Lonjon, N., & Ros, M. (2024). Comparing third-person video vs first-person immersive VR for procedural surgical skills: A pilot study. *Frontiers in Virtual Reality*, 5, 1408092. <https://doi.org/10.3389/frvir.2024.1408092>

From an implementation perspective, the anytime-anywhere accessibility of the medium enables a blended learning strategy: the teacher introduces the core movements in class (direct demonstration), then provides a flipbook link for reinforcement, independent practice, and simple formative assessment (e.g., embedded quizzes or Google Forms). Feedback can be delivered in the next meeting or through notes in online sessions. Such sequential microlearning practices align with contemporary instructional design trends that emphasize short duration, clear objectives, and scheduled repetition, as well as recommendations for instructional video design (concise, segmented, and supported with visual cues). By integrating visual guides (illustrations of bowing-standing sequences), audio models (recitations of prayers), and video demonstrations, students gain a “pocket trainer” that can reliably support home review particularly beneficial for learners who require more time to master the sequence of movements and recitations¹².

The local context of MTs Al-Hidayah Tanjungjaya further highlights the urgency of this innovation. Variations in family backgrounds and daily exposure to prayer practices result in significant disparities in students’ initial competencies. With the interactive flipbook, teachers can implement differentiated instruction: offering a beginner’s route (minimal obligatory movements), an intermediate route (refinement of recitation fluency), and an advanced route (emphasis on focus and correction of common mistakes). The hyperlink feature also allows the integration of simple observation rubrics to encourage peer assessment during paired practice in class. At the same time, evidence from e-learning literature underscores the importance of both instructional quality and user readiness. This implies that short training sessions for teachers and usage guidelines for students/parents are essential for ensuring the technology has a real impact.

Taken together, the research gap addressed in this study lies in the scarcity of investigations on the development of interactive flipbook-based e-books specifically targeting prayer practice at the madrasah level, accompanied by a

¹² Srinivasa, K., Chen, Y., & Henning, M. A. (2020). The role of online videos in teaching procedural skills to postgraduate medical learners: A systematic narrative review. *Medical Teacher*, 42(6), 689–697.

comprehensive evaluation of validity, practicality, and effectiveness. The novelty of this research rests on three points: (1) the integration of Heyzine Flipbook as a medium that combines text, sequential images, prayer recitation audio, and prayer movement videos into segmented microlearning pathways; (2) an instructional design explicitly grounded in multimedia learning principles (segmentation, signaling, modality, minimal redundancy) for procedural religious tasks; and (3) a blended implementation scheme tailored to device availability in madrasahs, enabling structured self-study at home alongside guided formative assessment. With this framework, the study at MTs Al-Hidayah Tanjungjaya is expected to provide empirical evidence that the interactive e-book is not only feasible and well-received, but also effective in improving students' accuracy of movement sequences, correctness of recitation, and devotional focus during prayer while remaining realistic with respect to teachers' workload and school infrastructure¹³.

METHOD

This study employed a Research and Development (R&D) approach with the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation) to develop interactive e-book learning media based on Heyzine Flipbook for prayer materials at MTs Al-Hidayah Tanjungjaya, Central Lampung. The participants consisted of 17 seventh-grade students, 2 Islamic Religious Education (PAI) teachers, and 2 expert validators (media and content). The procedure included a pre-test to assess students' prior knowledge, the implementation of the media following the ADDIE storyboard, and a post-test to evaluate learning improvement. Response questionnaires were distributed to students and teachers to measure practicality, while validation sheets completed by expert validators assessed content and design aspects.

¹³ Bond, M., Buntins, K., Bedenlier, S., Zawacki-Richter, O., & Kerres, M. (2020). Mapping research in student engagement and educational technology in higher education: A systematic evidence map. *International Journal of Educational Technology in Higher Education*, 17(2). <https://doi.org/10.1186/s41239-019-0176-8>

Instrument content validity was tested using the Content Validity Index (CVI) with a threshold of ≥ 0.80 as the criterion for validity¹⁴. Reliability was tested using Cronbach's Alpha (acceptable coefficient ≥ 0.70 ;¹⁵) or KR-20, depending on the type of test item (particularly for objective tests). Data analysis included descriptive statistics (mean, percentage, and standard deviation). Learning effectiveness was analyzed using Normalized Gain (N-gain), categorized as high ($g > 0.7$), medium ($0.3 \leq g \leq 0.7$), and low ($g < 0.3$)¹⁶. In addition, a paired-samples t-test was conducted to examine the significance of differences between pre-test and post-test scores, with reporting of effect size (Cohen's d). All analyses were conducted using statistical software (SPSS/JASP), with results presented in terms of t-statistics, p-values, and confidence intervals. The success of the developed product was determined based on three criteria: validity (CVI $\geq 80\%$), practicality (questionnaire score $> 85\%$), and effectiveness (high N-gain and statistically significant improvement). The findings served as the basis for recommendations on design refinement and broader implementation.

RESULTS AND DISCUSSION

The findings indicate that the Heyzine Flipbook-based learning media developed in this study met high feasibility standards in terms of validity, practicality, and effectiveness. Quantitatively, the media validity score reached 87.45%, categorized as *very valid*. The practicality score was 89.28%, categorized as *very practical*. Meanwhile, the effectiveness score measured using the N-gain test was 74.05%, placing it within the *moderately to highly effective* category. These results demonstrate that the media not only passed theoretical validation through expert review but also proved to be practical for teachers and students, and effective in improving learning outcomes.

¹⁴ Sangoseni, W., et al. (2024). Evaluation of content validity and face validity of secondary school Islamic education teacher self-assessment instrument. *Cogent Education*.

¹⁵ Sugiharto, H. (2024). Comparative test of Cronbach's alpha reliability coefficient, KR-20, KR-21, and split-half method. *Journal of Education Research and Evaluation*, 8(1), 47–57.

¹⁶ Navarrete, J., Giaconi, V., Contador, G., & Vazquez, M. (2024). Another reason why normalized gain should continue to be used to analyze concept inventories (and estimate learning rates).

The success of this media development was influenced by several factors: (1) the integration of interactive multimedia text, images, videos, and animations that attracted students' attention while enhancing cognitive engagement; (2) ease of access through digital devices such as laptops and smartphones, enabling flexible learning; and (3) a simple and user-friendly interface design, which allowed students to understand the material more quickly without technical difficulties. However, some challenges were also identified, such as limited internet connectivity in certain school areas and the low level of digital literacy among some students, which required intensive guidance during the initial stages of implementation. These findings align with Prasetyo & Nugroho¹⁷, who reported that digital flipbook-based interactive media significantly increased student learning interest, as well as Nurhayati¹⁸, who found that the use of animation in digital learning media improved the understanding of abstract concepts by up to 72%. Similarly, Sari & Putra¹⁹ emphasized that the effectiveness of digital media in improving learning outcomes can reach a high category when supported by interactive visual displays and simple navigation conditions also reflected in this study.

Compared to conventional learning media, Heyzine Flipbook was shown to be more effective in creating an interactive learning environment, although its effectiveness remained highly dependent on the readiness of both teachers and students in utilizing technology. A limitation of this study is that the trial has not yet been extended to broader educational levels, so the results remain contextual to the research setting. Nonetheless, this study contributes to the development of innovative digital learning media and highlights the importance of digital literacy

¹⁷ Prasetyo, A., & Nugroho, E. (2021). Digital Flipbook as a Learning Media to Improve Students' Engagement in the Classroom. *Journal of Educational Technology Development and Exchange*, 14(2), 45-58.

¹⁸ Nurhayati, S., Andriani, R., & Yuliani, N. (2022). The Effectiveness of Animated Digital Media in Improving Conceptual Understanding of Students. *International Journal of Instructional Media*, 49(1), 23-34.

¹⁹ Sari, D. P., & Putra, R. A. (2023). Enhancing Students' Learning Outcomes through Interactive Multimedia-Based Learning Media. *Indonesian Journal of Educational Research and Technology*, 3(1), 12-25.

among teachers and students as a key factor in the successful implementation of technology-based learning media.

Conceptual Framework of Development

Development refers to the process of deepening, expanding, and improving existing knowledge, theories, practices, or products to make them more effective and efficient. It is an effort to renew what already exists so that it becomes more engaging, broader in scope, or more refined than before²⁰. The development method, commonly referred to in English as Research and Development (R&D), is a research process aimed at creating new products or tools, or enhancing existing research outcomes. This approach requires in-depth analysis because it involves procedures to test effectiveness in order to determine the feasibility of the developed product or tool²¹. In the educational context, development is an attempt to improve technical, conceptual, theoretical, and moral capabilities in accordance with actual needs, with the ultimate goal of enhancing the quality of education itself²².

Learning Media

Learning media serve as a communication tool designed to strengthen the effectiveness of the teaching and learning process. By using media, students' attention can be more easily focused, thereby helping them to better understand the subject matter²³. In a broader sense, learning media can be defined as all instruments or means used to convey lesson content in a way that attracts learners' attention and interest, enabling them to comprehend the message being delivered.

²⁰ Fernando Andrew, "Pengembangan Media Pembelajaran," *Medan: Yayasan Kita Menulis*, 2020.

²¹ Sugiono, *Metode Penelitian Pendidikan, Pendekatan Kualitatif, Kuantitatif, Dan R and D* (Bandung: ALFABETA, 2016).

²² Sudarwan Sugiyono, "Metode Penelitian Pendidikan Pendekatan Kualitatif, Kuantitatif Dan R & D," *Alfabeta, Bandung* 4 (2018).

²³ Sohibun Sohibun and Filza Yulina Ade, "Pengembangan Media Pembelajaran Berbasis Virtual Class Berbantuan Google Drive," *Tadris: Jurnal Keguruan Dan Ilmu Tarbiyah* 2, no. 2 (2017): 121-29.

Learning media include various components within the learning environment that can stimulate and encourage students to actively engage in learning²⁴.

Interactive E-Books and Heyzine Flipbook

Fundamentally, an e-book can be defined as a digital learning resource designed with an attractive display and easily accessible through multiple electronic devices. These devices include smartphones, personal computers, laptops, tablets, and other virtual display tools. Unlike printed books, e-books offer greater flexibility and convenience, as they can be accessed anytime and anywhere as long as digital devices are available. One of the main advantages of e-books is their multimodal nature, enabling the integration of text, images, audio, video, animation, and graphics within a single resource. This feature makes e-books highly relevant to current educational needs, supporting more interactive and effective learning experiences. Moreover, e-books can be adapted to the existing curriculum, making them an ideal tool for modern educational settings.

Heyzine Flipbook is a web-based application designed to facilitate the creation of interactive e-books. Through Heyzine, users can enrich their digital books with multimedia elements such as videos, images, graphics, audio, and interactive hyperlinks. This makes the resulting e-books more engaging, dynamic, and capable of providing an immersive reading experience. A key strength of Heyzine is its animated page-flip effect, which simulates the sensation of turning the pages of a physical book. This visual effect not only enhances reader engagement but also creates a more lively and creative learning atmosphere. By combining technological features with intuitive design, Heyzine Flipbook offers an ideal solution for teachers, students, and content creators who wish to produce high-quality e-books that captivate readers through interactivity and modern aesthetics²⁵.

²⁴ Junaidi Junaidi, "Peran Media Pembelajaran Dalam Proses Belajar Mengajar," *Diklat Review: Jurnal Manajemen Pendidikan Dan Pelatihan* 3, no. 1 (2019): 45-56, <https://doi.org/10.35446/diklatreview.v3i1.349>

²⁵ Luwilmi Sahefa Ashari and Durinda Puspasari, "Pengembangan E-Modul Berbasis Heyzine Flipbook Pada Mata Pelajaran Otomatisasi Humas Dan Keprotokolan Di SMKN 2 Buduran Sidoarjo," *Journal of Social Science Research* 4, no. 1 (2024): 2568.

CONCLUSION

Based on the findings of this study, it can be concluded that the Heyzine Flipbook-based learning media has been proven to be valid, practical, and effective in enhancing the quality of learning. The validity of the media reached the "highly valid" category, both in terms of content and design, making it feasible to be used as a learning medium. Its practicality was demonstrated through the positive responses of teachers and students, who assessed the media as easy to use, engaging, and helpful in understanding the material. The effectiveness of the media was reflected in the improvement of students' learning outcomes, motivation, and active participation in the learning process. Implication-wise, this study contributes to teachers by providing insights into the development of innovative digital learning media that align with the demands of the technological era. For students, the use of Heyzine Flipbook can increase interest and foster a more interactive learning experience. For future research, the results of this study can serve as a foundation for expanding the application of similar media across different subjects and educational levels, as well as for integrating it with other learning strategies to create more meaningful learning experiences.

Bibliography

Alqahtani, A. Y., & Rajkhan, A. A. (2020). E-learning critical success factors during the COVID-19 pandemic: A comprehensive analysis of e-learning managerial perspectives. *Education Sciences*, 10(9), 216. <https://doi.org/10.3390/educsci10090216>

Andrew, F. (2020). *Pengembangan media pembelajaran*. Medan: Yayasan Kita Menulis.

Arifin, S., & Herman, T. (2018). The use of interactive multimedia to improve mathematics learning outcomes of elementary school students. *Journal of Physics: Conference Series*, 1132(1), 012046. <https://doi.org/10.1088/1742-6596/1132/1/012046>

- Ashari, L. S., & Puspasari, D. (2024). Pengembangan e-modul berbasis Heyzine Flipbook pada mata pelajaran Otomatisasi Humas dan Keprotokolan di SMKN 2 Buduran Sidoarjo. *Journal of Social Science Research*, 4(1), 2568.
- Asrial, Syahrial, Kurniawan, D. A., Chan, F., & Septiasari, R. (2019). Multimedia innovation 4.0 in education: E-modul ethnoconstructivism. *Universal Journal of Educational Research*, 7(10), 2098–2107. <https://doi.org/10.13189/ujer.2019.071007>
- Azzahra, P. T., Asbari, M., & Nugroho, D. E. (2024). Urgensi peran generasi muda dalam meningkatkan pendidikan berkualitas. *Journal of Information Systems and Management (JISMA)*, 3(1), 90–92.
- Azizah, N., & Suryani, N. (2020). The effectiveness of digital flipbook media in improving learning outcomes in history subjects. *International Journal of Emerging Technologies in Learning (ijET)*, 15(19), 95–110. <https://doi.org/10.3991/ijet.v15i19.14933>
- Fauzan, M., & Arifin, M. (2021). The development of interactive digital teaching materials using flipbook maker to support online learning. *Jurnal Pendidikan Indonesia*, 10(2), 303–314. <https://doi.org/10.23887/jpi-undiksha.v10i2.28992>
- Firdaus, N. N., & Harsiwi, N. E. (2024). Analisis anak berkebutuhan khusus serta kendala di SLB Negeri Keleyan Bangkalan. *Multidisciplinary Indonesian Center Journal (MICJO)*, 1(3), 1460–1468.
- Junaidi, J. (2019). Peran media pembelajaran dalam proses belajar mengajar. *Diklat Review: Jurnal Manajemen Pendidikan dan Pelatihan*, 3(1), 45–56. <https://doi.org/10.35446/diklatreview.v3i1.349>
- Kurniawati, N., & Lestari, A. (2022). Development of digital learning media using flipbook applications to improve students' motivation. *Jurnal Ilmiah Pendidikan*, 9(1), 55–63.

- Pratama, R., & Setyaningrum, W. (2018). The development of interactive mathematics learning media based on flipbook. *Infinity Journal*, 7(2), 109–122. <https://doi.org/10.22460/infinity.v7i2.p109-122>
- Putri, R. D., & Nugroho, Y. (2021). Development of flipbook-based e-modules to improve students' learning outcomes in science. *Jurnal Pendidikan Sains Indonesia*, 9(1), 31–40. <https://doi.org/10.24815/jpsi.v9i1.18205>
- Rahmawati, I., & Utami, R. (2022). Effectiveness of flipbook-based digital teaching materials on students' critical thinking skills. *Journal of Education Technology*, 6(2), 200–208. <https://doi.org/10.23887/jet.v6i2.43819>
- Riyadi, B. (2015). Pengembangan media pembelajaran fisika berbasis Kvisoft Flipbook Maker yang merujuk pada nilai-nilai keislaman di Perguruan Tinggi Negeri Bandar Lampung. *Skripsi, Fakultas Tarbiyah dan Keguruan*.
- Saputri, A. L. M. (2024). Pengembangan modul digital berbasis Flipbook Maker pada mata pelajaran Akidah Akhlak kelas VII di MTsN Berau. *Jurnal Ilmiah Edunomika*, 8(1).
- Sohibun, S., & Ade, F. Y. (2017). Pengembangan media pembelajaran berbasis virtual class berbantuan Google Drive. *Tadris: Jurnal Keguruan dan Ilmu Tarbiyah*, 2(2), 121–129.
- Suarsana, I. M., & Mahayukti, G. A. (2017). Development of e-learning flipbook with problem-based learning model to improve critical thinking ability of students. *International Journal of Education and Research*, 5(10), 107–118.
- Sugiono. (2016). *Metode penelitian pendidikan: Pendekatan kualitatif, kuantitatif, dan R&D*. Bandung: Alfabeta.
- Sugiyono, S. (2018). *Metode penelitian pendidikan: Pendekatan kualitatif, kuantitatif, dan R&D* (4th ed.). Bandung: Alfabeta.

Yuliani, H., & Rahmat, A. (2019). The effect of interactive e-book based on flipbook maker on students' learning motivation. *Jurnal Pendidikan Biologi Indonesia*, 5(2), 209–218. <https://doi.org/10.22219/jpbi.v5i2.8295>