International Conference on Elementary Education
Volume 8, Nomor 1
e-ISSN: 2808-8263
p-ISSN: 2829-0976

Learning Transformation: The Role of Interactive Media in the Implementation of the Independent Curriculum in Elementary Schools

Ahmad Suryadi[1*], Andika Arisetyawan[2]

[1]Universitas Pendidikan Indonesia. Jl. Dr. Setiabudhi 229 Bandung, Indonesia

suryadiajah658@gmail.com

Abstract. The Merdeka Curriculum (Independent Curriculum) demands a learning transformation toward a more flexible, student-centered approach, where interactive media is expected to play a key role. However, a comprehensive synthesis of how this media is being implemented, its consistent impact, and the real-world challenges in Indonesian Elementary Schools remains lacking. This study aims to analyze the role of interactive learning media in supporting the implementation of the Merdeka Curriculum in Elementary Schools. This study uses a Systematic Literature Review (SLR) methodology adhering to the PRISMA protocol. An article search (2020–2024) was conducted using Publish or Perish on the Google Scholar, Scopus, and SINTA databases. From 985 identified articles, 10 articles were selected through a rigorous screening and criteria process for qualitative synthesis. The synthesis results show a strong consensus: (1) Interactive media consistently improves both cognitive (learning outcomes) and affective (motivation, learning interest, critical thinking) domains, aligning with global trends. (2) Two dominant media categories were identified: Low-Code/No-Code platforms (like Canva and LearningApps) and Developed Applications (such as Android-based media). (3) A "publication gap" was found; the primary implied challenge is a "Second-Order Barrier" (teacher digital competency), which in the Indonesian context co-exists with "First-Order Barriers" (infrastructure), creating a "dual challenge".

Keywords: Interactive Learning Media; Independent Curriculum; Elementary School; Literature Review.

INTRODUCTION

The current industrial era 4.0 brings major changes with the emergence of various technological innovations in life. The industrial revolution 4.0 is also known as the era of the digital revolution because of the proliferation of computers and automation of recording in all fields.(Retnaningsih & Khairiyah, 2022). The massive development of the digital era has not only had an impact on social life, but also on the world of education. Education is required to develop in accordance with the changing times. Therefore, the development of the industrial revolution era 4.0 brings to the concept of society 5.0. Society 5.0 is a concept of a human-centered society. This concept places humans as the center of innovation. Human life is centered on a technology basis. Every individual must have mastery of technology. Education as a means of forming human competence is required to provide students with technological skills(A'yun et al., 2024).

Responding to all changes in the development of the era of education in Indonesia, also experienced various changes. One of the changes made is in the change of the education curriculum. The curriculum is said to be the life of education. Because the course of the education process refers to the procedures set out in the curriculum(Retnaningsih & Khairiyah,

2022). After the Covid-19 pandemic, the government implemented a new curriculum called the independent curriculum. The determination of the Decree is based on the (SK) curriculum Letter of the Ministry of Education, Culture, Research, and Technology Number 56 of 2022 concerning Guidelines for the Implementation of the Curriculum in the Context of Learning Recovery. The decree contains points on simplifying education in elementary and secondary schools.

The independent curriculum provides a fun learning concept to realize liberating learning. The learning in question is the entire series of teaching and learning activities starting from planning, learning process, and assessment. The existence of the independent curriculum is a form of renewal and solution to improve the quality of education in Indonesia. The successful implementation of the independent curriculum requires cooperation from all parties involved in education, both directly and indirectly. This is in line with the opinion According to Law Number 20 of 2003 in(Syahruddin, 2024)states that the curriculum is a set of plans and arrangements regarding objectives, content, and learning materials as well as methods used as guidelines for organizing learning activities to achieve educational goals.
In general, the independent curriculum has the nature of a project-based curriculum that aims to develop students' social skills and characteristics according to the profile of Pancasila students. In this situation, teachers have the freedom to choose strategies, methods, media, and learning materials that suit the needs and interests of students through various teaching approaches. According to Lince, effective learning must include cognitive, affective, and motor aspects. In evaluating learning progress, the assessment does not only focus on the amount, but also on the quality of educational innovations carried out by the school. This includes changes in the learning process, the learning environment related to the subject, improving learning facilities, and improving teacher professionalism.

A new curriculum certainly has weaknesses. One of the weaknesses of implementing the independent learning curriculum is that it becomes an obstacle and challenge for implementing the curriculum. There are several challenges that must be faced, here are five challenges faced by teachers in independent learning programs: a) Overcoming the comfort zone in the learning system; b) Lack of experience in independent learning programs; c) Limited reference sources; d) Teaching techniques; e) Limited facilities and teacher quality. However, the advantage of implementing the independent learning curriculum is that there are no binding space and time limitations.

e-ISSN: 2808-8263
p-ISSN: 2829-0976

With unlimited benefits in terms of flexibility of space and time, it is important for a teacher to utilize electronic devices as a supporting tool in teaching and learning activities. The goal is to make the teaching and learning process more interesting, effective, and efficient. One method that can be used in learning is the use of learning media based on information and communication technology. In line with the advantages of the independent curriculum which emphasizes technology-based learning, the development of information and communication technology in the 20th century in the education sector has had a significant impact. In this technological era, teachers are faced with the demands of developing skills in creating learning media that can improve students' thinking intelligence.

To overcome these challenges, the use of appropriate learning media is very important for teachers so that students can achieve the necessary learning skills. Moreover, in the era of the industrial revolution 4.0 which is currently developing, educators are required to organize learning that is in accordance with technological developments and learning innovations. According to Blyznyuk and Tetyana as quoted by Naikpangkat.com, teachers need to have digital competencies that include information, communication, editional content creator, security, and educational problem solving. One of the learning media that is expected to create an interesting, conducive, and appropriate learning atmosphere for students' characteristics, and can support a teacher's competence in the independent curriculum, is the use of interactive learning media.

Sahnan & Wibowo, (2023)stated that the independent curriculum carries the concept of independent learning which aims to ensure that students do not feel burdened in the learning process. Students are given the freedom to master the field of knowledge according to their expertise. The flexibility in the independent curriculum also gives teachers the freedom to provide learning that is relevant and in accordance with the development of the digital era.(Marisana et al., 2023). It can be concluded that the use of interactive learning media can provide a variety of interesting and more flexible learning media. The goal is to make the teaching and learning process more interesting, effective, and efficient. One way that can be used in learning is the use of interactive learning media. In line with the advantages of the independent curriculum which emphasizes technology-based learning, the development of information and communication technology in the 20th century in the education sector has had a significant impact. In this technological era, teachers are faced with the demands of developing skills in creating learning media that can improve students' thinking intelligence(Anam & Septiliana, 2023).

The development of the current digital era can be applied to optimize the independent learning curriculum. The use of interactive learning media can provide a variety of interesting and more flexible learning media. The content in interactive media provides flexibility for various uses of science to access knowledge. In learning, it has advantages, namely, technology makes it more interactive, student understanding is easier and faster and learning feels fun(Reynolds et al., 2012). The use of interactive media is also a means of honing students' technological mastery. Interactive media can provide stimulus to support learning. The form of stimulus used is the relationship between humans, moving images, writing and sound. This stimulus can support students in learning.

In addition, the role of teachers in learning is no longer as a full presenter of material but rather teachers act as facilitators for students because in learning in the Independent Curriculum students are required to be independent in determining information that is not only sourced from books but information can be found using the internet, be it learning videos, images, and so on so that students can grow an interest in wanting to learn. Factors that influence increasing student success in interpreting learning at school include the teacher's ability to create learning that attracts students' interest in learning. The use of learning media can produce interesting learning(Mujahidin et al., 2012). On the contrary,(Apriliani & Radia, 2020)states learning media as "everything that is useful for conveying useful information to arouse students' interests, desires, and willingness". One of the learning media that is expected to create an interesting, conducive, and appropriate learning atmosphere for students' characteristics, and can support a teacher's competence in the independent curriculum.

Several related studies regarding Interactive Learning Media as a Support for the Implementation of the Independent Curriculum in Elementary Schools include research conducted byArrum et al., (2023)which the results of the research conducted showed that there was an increase in the mathematics learning outcomes of students in class IV A SDN Bantarjati 9 Bogor City by implementing interactive multimedia based on the LearningApps web, namely 95% or as many as 19 out of 20 students met the criteria for the completeness of learning objectives. In addition, research was also conducted byThe Last Supper (2020) which the results of the research conducted showed that in general the learning model through interactive learning media (video swf) can motivate students so that it can improve student learning achievement. Students gave a positive response to the implementation of the interactive learning model (video swf). This is also in line with research conducted by A'yun et al., (2024)which the results of the research conducted show that the use of digital learning

e-ISSN: 2808-8263
p-ISSN: 2829-0976

media in the independent curriculum has a significant positive impact on the quality of learning. However, there are still challenges and obstacles in its implementation.

Previous studies, such as those conducted by Arrum et al., (2023), Harsiwi & Arini (2020) and A'yun et al., (2024) have shown the positive impact of using interactive learning media on learning outcomes and learning quality in elementary schools. These studies provide strong evidence at the case study level, but are still partial. There is a clear research gap, in that there has been no comprehensive synthesis that collectively maps these findings. Therefore, this Systematic Literature Review (SLR) research is unique and important to conduct. The uniqueness of this study lies in its specific focus on the 2020-2024 time frame, a crucial period in which the Merdeka Curriculum began to be introduced and implemented nationally, along with the acceleration of technology adoption in the post-pandemic era. In addition, this study focuses exclusively on the context of elementary schools. Specifically, this study was formulated to answer several research questions : (1) How does the implementation of interactive learning media impact the learning process and outcomes of elementary school students in the context of the Merdeka Curriculum? (2) What are the types and models of interactive learning media that have been most widely researched and applied to support the Merdeka Curriculum at the elementary school level during the 2020-2024 period? (3) What are the main obstacles and challenges identified in the literature related to the application of interactive learning media in elementary schools?

METHODOLOGY

This study uses a systematic literature review (SLR) approach with reference to the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) protocol. This approach was chosen to provide a comprehensive, transparent, and unbiased synthesis of previous research results on the implementation of interactive learning media as a support for the Merdeka Curriculum in the context of basic education in Indonesia. As stated by experts, systematic literature reviews aim to summarize scientific evidence scattered across various studies so that it can be used as a basis for evidence-based decision making.

To emphasize the philosophical and scientific validity of this method, this approach is considered within the framework of scientific knowledge logic, in which this systematic literature review not only serves as secondary data collection but also as a form of rational reconstruction of previous empirical results. Thus, this method occupies a strategic position in the context of qualitative research based on in-depth conceptual analysis.

The data collection process was carried out by searching for articles using Publish or Perish (PoP) software, which accessed reputable databases such as Google Scholar, Scopus, and SINTA. The keywords used were “interactive learning media,” “merdeka curriculum,” and “elementary school” (and their equivalents in English: “interactive learning media,” “merdeka curriculum,” and “elementary school”). The search time frame was set from January 2020 to October 2024, considering that this topic has become highly relevant since the acceleration of post-pandemic technology and the implementation of the Merdeka Curriculum in Indonesia.

The inclusion and exclusion criteria were strictly established as described in Table 1 (placed after this paragraph), covering aspects such as time range, type of publication, article language, and topical focus. The screening process was carried out in three stages: (1) initial identification based on titles and abstracts, (2) assessment of availability and completeness of the full-text articles, and (3) evaluation of methodological eligibility and content relevance for inclusion in the final synthesis.

A total of 985 article titles were identified, and after undergoing a multi-stage selection process (as illustrated in the PRISMA Flow Diagram), 10 articles were selected for in-depth analysis. All analyzed articles were empirical studies (qualitative, quantitative, or mixed-methods) that examined or reported the implementation of interactive media in elementary school learning contexts relevant to the Merdeka Curriculum.

The analysis was conducted qualitatively, emphasizing three main focuses to answer the Research Questions : (1) trends in the impact of interactive media on student learning processes and outcomes, (2) the dominant types and models of interactive media used, and (3) the reported obstacles or challenges in its implementation. The selection of a qualitative approach for this data synthesis is also consistent with qualitative methodology, which is oriented towards a deep understanding of phenomena and allows for the interpretation of findings by considering the context of the educational practices being studied.

Table 1. Inclusion and Exclusion Criteria

Criteria	Inclusion Criteria (Accepted)	Exclusion Criteria (Rejected)
Timeframe	Articles published between 2020–2024.	Published before January 1, 2020.
Main Topic	The study focuses on interactive media AND the Merdeka	Only discusses media (without the Merdeka Curriculum context) or vice versa.

e-ISSN: 2808-8263
p-ISSN: 2829-0976

	Curriculum (or relevant post-2020 context).	
Context (Level)	Research conducted in the context of Elementary School (SD) or Madrasah Ibtidaiyah (MI).	Research at the Junior High School (SMP), Senior High School (SMA), or Higher Education level.
Publication Type	Full-text scientific journal articles or conference proceedings.	Book reviews, editorials, theses/dissertations, or opinion articles.
Language	Articles in Indonesian or English.	Articles in other languages.

RESULTS AND DISCUSSION

Results

Analysis of 10 scientific article journals that describe the implementation of interactive learning media resulted in an increase in the potential of students towards a better direction. The results of the implementation of interactive learning media are summarized in table 1.

Table 1. Summary of the Results of the Implementation of Interactive Learning Media in the 10 Articles Reviewed

No	Researcher Name and Year	Article Title	Research result
1	(Harsiwi & Arini, 2020)	The Influence of Learning Using Interactive Learning Media on Student Learning Outcomes in Elementary Schools	The results of this study indicate that the learning model through interactive learning media (video swf) can motivate students so that it can improve student learning achievement. Students gave a positive response to the implementation of the interactive learning model (video swf).
2	(Ruswan et al., 2024)	Utilization of Android-Based Learning Media in the Elementary School Independent Curriculum	The results of this study indicate that Android-based learning can support the curriculum in elementary schools, thereby

			increasing students' interest and motivation to learn.
3	(Arrum et al., 2023)	Implementation of Web-Based Interactive Multimedia LearningApps to Improve Mathematics Learning Outcomes of Grade IV Elementary School Students	The results of this study indicate that there is an increase in students' mathematics learning outcomes in class IV A SDN Bantarjati 9 Bogor City by implementing interactive multimedia based on the LearningApps web, namely 95% or 19 out of 20 students meet the criteria for the completeness of learning objectives. In addition, the implementation of learning by teachers shows success with a percentage of 97.73%. Thus, interactive multimedia based on the LearningApps web has a positive impact on students' mathematics learning outcomes
4	(Rachmawati et al., 2023)	Interactive Multimedia Based on Articulate Storyline 3 as an Alternative Learning Media for Geographical Characteristics of Indonesia in Elementary Schools	The results of this study indicate that student learning outcomes after the use of interactive multimedia are higher than before the use of multimedia. Based on the data from the validity, practicality and effectiveness tests, it can be concluded that interactive multimedia by utilizing Articulate Storyline 3 is valid, practical and effective to use.

e-ISSN: 2808-8263
p-ISSN: 2829-0976

5	(Suryani & Suciptaningsih, 2024)	Transformation of Pancasila Learning: The Advantages of Interactive Learning Media “Sibola Lala” for Grade 1 Elementary School Students	The results of this study indicate that the interactive learning media Sibola Lala can improve students' critical thinking skills, especially in Pancasila lessons.
6	(Anam & Septiliana, 2023)	Use of Autoplay Learning Media to Support the Independent Curriculum in Elementary Schools	The results of this study indicate that in supporting the implementation of the independent curriculum, information and communication technology-based learning with autoplay learning media is an effective tool.
7	(Arikarani, 2024)	Adaptation of Technology and Learning Media Through Canva on the Implementation of Islamic Religious Education Learning in the Independent Curriculum	The results of this study indicate that Canva learning media supports the implementation of learning in the independent curriculum and makes learning feel effective, innovative and enjoyable for students.
8	(Madona et al., 2023)	Use of Cultural Diversity Learning Media National Interactive Multimedia-Based Curriculum: Responses of Teachers and Students of Integrated Islamic Elementary Schools to the Implementation of the Independent Curriculum	The results of this study indicate that the use of interactive multimedia-based social studies media "Understanding National Cultural Diversity" in learning is stated to be very practical and can be used in the learning process on the National Cultural Diversity material.
9	(Ar et al., 2024)	Interactive Learning Media Development Training to Improve Elementary School Teachers' Digital	The results of this study indicate that if teachers are able to create interactive learning media, then this can support

		Literacy-Numeracy in the Era of Independent Learning	learning with the hope of creating an active, interactive, creative, effective and enjoyable learning process atmosphere.
10	(A'yun et al., 2024)	Optimizing the Independent Curriculum: The Role of Digital Learning Media in Elementary School Education	The results of this study indicate that the use of digital learning media in the independence curriculum has a significant positive impact on the quality of learning.

The results of a review of 10 scientific articles on the implementation of interactive learning media to support the implementation of the independent curriculum in elementary schools showed positive results towards improving student abilities.

Discussion

The analysis in this systematic review moves beyond mere annotated description (as presented in Table 1) toward a thematic and integrative meta-synthesis. This section is organized to address the three Research Questions (RQs) outlined in the introduction, by comparing findings from the Indonesian literature with relevant international research conducted between 2020 and 2024.

Answer to RQ1: The Consistent Impact of Interactive Media on Learning Outcomes and Motivation

The first research question (RQ1) focused on the impact of implementing interactive media. The synthesis of the 10 reviewed articles shows a strong consensus that interactive media provides a significant positive impact, both in the cognitive and affective domains.

In the cognitive domain, there is recurring evidence that interactive media directly improves students' academic learning outcomes. For instance, Arrum et al., (2023) reported a significant increase in mathematics learning outcomes through LearningApps, while Rachmawati et al., (2023) found higher learning outcomes after using Articulate Storyline. These findings are supported by Harsiwi & Arini (2020), who also noted an increase in learning achievement. This trend in Indonesia is highly consistent with global findings. A meta-analysis by Saputri et al., (2025) and a systematic review by Dewi et al., (2025) also concluded that interactive media (such as Wordwall) has a strong positive effect on learning outcomes, especially due to its ability to simplify abstract concepts and provide instant feedback. In the affective domain,

e-ISSN: 2808-8263
p-ISSN: 2829-0976

which is a core part of the Independent Curriculum, this synthesis found a strong impact. Studies by Harsiwi & Arini (2020) and Ruswan et al., (2024) explicitly highlighted an increase in student motivation and learning interest. Furthermore, Arikarani (2024) noted the creation of effective and enjoyable learning, and Suryani & Suciptaningsih (2024) identified an improvement in critical thinking skills. This is supported by international literature. A systematic review by Seituni et al., (2024) on educational games found that interactivity is key to fostering learning motivation. Theoretically, these findings align with the Cognitive Theory of Multimedia Learning (CTML), as summarized by Aryfien et al., (2025), which states that interactive media engages multiple processing channels (visual and verbal), leading to more active student participation and deeper learning.

Answer to RQ2: The Landscape and Categories of Interactive Media Used

The second research question (RQ2) focuses on the types of media used. An analysis of the 10 articles reveals a diverse technological landscape, which can be synthesized into two main categories:

Low-Code/No-Code Platforms: This category includes platforms that are easy for teachers to use without requiring deep coding expertise. The most prominent examples from these findings include the use of Canva Arikarani (2024) and web-based platforms like Learning Apps (Arrum et al., 2023). This category is popular because it allows teachers to quickly create engaging visual materials (infographics, quizzes). This trend is validated by external literature; an SLR by Rahmawati & Utama (2025) concluded that Canva effectively enhances creativity, collaboration, and student motivation, making it a highly relevant tool for project-based learning within the Independent Curriculum. Developed Applications: The second category is media specifically developed using authoring tools or specific frameworks. Examples include Android-based media Ruswan et al., (2024), media built with Articulate Storyline Rachmawati et al., (2023), or custom applications like "Sibola Lala" (Suryani & Suciptaningsih, 2024). The effectiveness of Android-based media, in particular, is strongly supported by a meta-analysis by Tasrif et al., (2023), which found that Android-based mobile learning media has a "very high" effect size in improving learning outcomes. This synthesis shows that there is no one-size-fits-all media solution; the choice of media is highly dependent on the learning objectives and the teacher's digital competency.

Answer to RQ3: Publication Gap and Implementation Challenges

The third research question (RQ3) highlights existing challenges. A comparative analysis of the 10 articles reveals a significant publication gap. Almost all (9 out of 10) of the reviewed articles focus exclusively on the positive impacts and successful implementation. These studies tend to be "success stories."

The only article that implicitly mentions challenges is the finding by Ar et al., (2024), which highlights the need for "Interactive Media Development Training" for teachers. This implies that the primary perceived obstacle is the low digital competency of teachers to create and effectively use such media. This implicit finding, when compared with international literature, turns out to touch upon the core of the biggest problem. Global systematic reviews consistently identify two categories of inhibitors (often referred to as Ertmer's barriers): First-Order Barriers (Extrinsic) such as lack of infrastructure and device availability, and Second-Order Barriers (Intrinsic) such as lack of teacher confidence, resistance to change, and lack of digital pedagogical competence (Gusmana & Syamzaimar, 2025). Herein lies a crucial contextual difference. While developed countries have generally overcome first-order barriers, an SLR by Gusmana & Syamzaimar (2025) focusing on developing countries confirms that contexts like Indonesia still face a dual challenge: (1) issues of infrastructure, access, and device availability (as also alluded to in this manuscript), and simultaneously (2) the urgent need to address second-order barriers, namely teacher readiness and competency. This implies that the successful implementation of the Independent Curriculum requires not only sophisticated media but also significant investment in teacher training and the equalization of basic infrastructure.

CONCLUSION

Based on the thematic meta-synthesis of the 10 analyzed articles, this Systematic Literature Review (SLR) draws several key conclusions to answer the three formulated Research Questions (RQs).

First (answering RQ1), there is a strong consensus of evidence that the implementation of interactive learning media provides a significant positive impact in supporting the Merdeka Curriculum. This impact is proven consistent in two domains: the cognitive domain, through the improvement of academic learning outcomes, and the affective domain, through the enhancement of students' motivation, learning interest, and critical thinking skills. This finding confirms that the trend in Indonesia aligns with global research findings.

e-ISSN: 2808-8263
p-ISSN: 2829-0976

Second (answering RQ2), the technological landscape used in Elementary Schools was identified as falling into two main categories. The first category is Low-Code/No-Code platforms that are easily accessible to teachers (such as Canva and LearningApps), and the second category is Developed Applications (specially developed applications) using authoring tools (like Articulate Storyline) or mobile-based (Android) frameworks.

Third (answering RQ3), a significant "publication gap" was identified. The majority of the literature focuses on "success stories," meaning implementation challenges were only found implicitly. The primary implied challenge is a "Second-Order Barrier" (intrinsic), namely the urgent need to improve teachers' digital-pedagogical competence. Unlike in developed countries, this finding indicates that Indonesia faces a "dual challenge", where this Second-Order Barrier co-exists with "First-Order Barriers" (extrinsic), such as access and infrastructure.

These findings imply that the successful implementation of the Merdeka Curriculum requires not only the availability of sophisticated media but also demands significant and sustained investment in teacher training and the equalization of basic infrastructure. Future research is advised to shift from merely reporting effectiveness to studies that specifically analyze teacher training models and strategies for overcoming implementation barriers in the field.

REFERENCES

A'yun, N., Afifah, N. U., Wardani, S., Widiarti, N., Purwati, P. D., & Widiyatmoko, A. (2024). OPTIMALISASI KURIKULUM MERDEKA: PERAN MEDIA PEMBELAJARAN DIGITAL PADA PENDIDIKAN SEKOLAH DASAR. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, *09*(02), 6367–6378.

Anam, S., & Septiliana, L. (2023). Penggunaan Media Pembelajaran Autoplay untuk Menunjang Kurikulum Merdeka di Sekolah Dasar. *Al-Madrasah: Jurnal Pendidikan Madrasah Ibtidaiyah*, *7*(3), 1228. https://doi.org/10.35931/am.v7i3.2502

Apriliani, S. P., & Radia, E. H. (2020). Pengembangan Media Pembelajaran Buku Cerita Bergambar Untuk Meningkatkan Minat Membaca Siswa Sekolah Dasar. *Jurnal Basicedu*, *4*(4), 994–1003. https://doi.org/10.31004/basicedu.v4i4.492

Ar, M. M., Aini, K., Hardiansyah, F., & Kunci, K. (2024). Pelatihan Pengembangan Media Pembelajaran Interaktif untuk Meningkatkan Literasi-numerasi Digital Guru Sekolah Dasar di Era Merdeka Belajar. *Jurnal Pengabdian Dan Pemberdayaan Masyarakat*, *01*(February 2023), 111–125.

Arikarani, Y. (2024). Adaptasi Teknologi Dan Media Pembelajaran Melalui Canva Terhadap Pelaksanaan Pembelajaran Pendidikan Agama Islam Dalam Kurikulum Merdeka. *Ej*, *6*(2), 111–127. https://doi.org/10.37092/ej.v6i2.677

Arrum, A. H., Safitri, N., & Akmala, M. I. (2023). Penerapan Multimedia Interaktif Berbasis Web Learningapps Untuk Meningkatkan Hasil Belajar Matematika Siswa Kelas Iv Sd. *Metodik*

Didaktik : Jurnal Pendidikan Ke-SD-An, *19*(1), 48–56. https://ejournal.upi.edu/index.php/MetodikDidaktik/article/view/57156

Aryfien, W. N., Ragil, I., & Atmojo, W. (2025). Interactive Learning Media for Better Learning Outcomes in Elementary School : A Systematic Literature Review. *Mimbar Sekolah Dasar*, *12*(1), 132–147. https://doi.org/10.53400/mimbar-sd.v12i1.82323

Dewi, M., Apriza, B., & Dinata, K. B. (2025). *The Effectiveness of Wordwall Interactive Media in Teaching Mathematics in Elementary School : A Systematic Literature Review*. *13*(1), 127–137.

Gusmana, I., & Syamzaimar. (2025). TANTANGAN DAN SOLUSI DALAM PENINGKATAN KUALITAS GURU MADRASAH IBTIDAIYAH DI ERA DIGITAL. *Al-Mujahadah : Islamic Education Journal*, *2*(2), 1–12.

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

Madona, A. S., Pebriyenni, Desfitri, E., Yulisna, R., Azkiya, H., Yuza, A., & Rosyid, F. E. (2023). Penggunaan media pembelajaran keragaman budaya nasional berbasis multimedia interaktif. *Jurnal Pendidikan Agama Islam Al-Thariqah*, *8*(2), 329–347. https://doi.org/10.25299/al-thariqah.2023.vol8(2).14692

Marisana, D., Iskandar, S., & Kurniawan, D. T. (2023). Penggunaan Platform Merdeka Mengajar untuk Meningkatkan Kompetensi Guru di Sekolah Dasar. *Jurnal Basicedu*, *7*(1), 139–150. https://doi.org/10.31004/basicedu.v7i1.4363

Mujahidin, A. A., Salsabila, U. H., Hasanah, A. L., Andani, M., & Aprillia, W. (2012). Pemanfaatan Media Pembelajaran Daring (Quizizz, Sway, dan Wordwall) Kelas 5 di SD Muhammadiyah 2 Wonopeti. *Innovative: Journal Of Social Science Research*, *1*(2), 552–560. https://doi.org/10.31004/innovative.v1i2.3109

Rachmawati, D. N., Kurnia, I., & Laila, A. (2023). Multimedia Interaktif Berbasis Articulate Storyline 3 Sebagai Alternatif Media Pembelajaran Materi Karakteristik Geografis Indonesia di Sekolah Dasar. *Jurnal Pemikiran Dan Pengembangan Sekolah Dasar (JP2SD)*, *11*(1), 106–121. https://doi.org/10.22219/jp2sd.v11i1.22316

Rahmawati, E. Y., & Utama, C. (2025). SLR : Canva Technology-Based Collaborative Learning Method for Elementary Schools. *Proceedings Series of Educational Studies*.

Retnaningsih, L. E., & Khairiyah, U. (2022). KURIKULUM MERDEKA PADA PENDIDIKAN ANAK USIA DINI. *Jurnal Program Studi PGRA*, *8*(2), 144–158. https://doi.org/10.69503/ijert.v4i1.579

Reynolds, J. A., Thaiss, C., Katkin, W., & Thompson, R. J. (2012). Writing-to-learn in undergraduate science education: A community-based, conceptually driven approach. *CBE Life Sciences Education*, *11*(1), 17–25. https://doi.org/10.1187/cbe.11-08-0064

Ruswan, A., Sholihah Rosmana, P., Husna, M., Nurhikmah, I., Irsalina, S., Azahra, R., & Faqih, A. (2024). Pemanfaatan Media Pembelajaran Berbasis Android pada Kurikulum Merdeka Sekolah Dasar. *Jurnal Pendidikan Tambusai*, *8*(1), 97–105.

Sahnan, A., & Wibowo, T. (2023). Arah Baru Kebijakan Kurikulum Merdeka Belajar Di Sekolah Dasar. *SITTAH: Journal of Primary Education*, *4*(1), 29–43. https://doi.org/10.30762/sittah.v4i1.783

e-ISSN: 2808-8263
p-ISSN: 2829-0976

Saputri, R. P., Yulastri, A., Giatman, M., Irfan, D., & Effendi, H. (2025). *Impact of Interactive Media Utilization on Enhancing Learning Outcomes : Meta-Analysis*. *11*(3), 40–49. https://doi.org/10.29303/jppipa.v11i3.10438

Seituni, S., Muhtar, W., Anam, M. C., As'ari, A. A., & Aditiya, M. (2024). ENHANCING STUDENT ENGAGEMENT AND MOTIVATION THROUGH EDUCATIONAL GAMES: A SYSTEMATIC LITERATURE REVIEW ON TECHNOLOGY INTEGRATION IN SCHOOLS. *Journal of Research, Review and Aducational Innovation*, *2*(1), 24–33. https://doi.org/https://doi.org/10.47668/jrrei.v2i1.1603

Suryani, S., & Suciptaningsih, O. A. (2024). Transformasi Pembelajaran Pancasila: Keunggulan Media Pembelajaran Interaktif "Sibola Lala" Bagi Siswa kelas 1 SD. *Jurnal Educatio*, *10*(2), 568–576. https://doi.org/10.31949/educatio.v10i2.8703

Syahruddin. (2024). Risalah : Jurnal Pendidikan dan Studi Islam Studi Literature Review Implementasi Kurikulum Belajar Merdeka Di Kota Banjarmasin. *Risalah: Jurnal Pendidikan Dan Studi Islam*, *10*(2), 770–781.

Tasrif, E., Annisa, L., & Witari, I. (2023). Meta Analisis Media Pembelajaran Mobile Learning Berbasis Android Terhadap Hasil Belajar Peserta Didik. *Jurnal PTI (Jurnal Pendidikan Teknologi Informasi)*, *10*(1), 17–22. https://doi.org/10.35134/jpti.v10i1.148