Journal of Educational Sciences
Journal homepage: https://jes.ejournal.unri.ac.id/index.php/JES

P-ISSN 2581-1657
E-ISSN 2581-2203

Trends in The Development of Articulate Storyline Media in Science Learning in Elementary Schools (2020-2025)

Fitriyani*, Langlang Handayani, Bambang Subali, Nuni Widiarti
Elementary Education, Postgraduate School, Universitas Negeri Semarang, Semarang, 50229, Indonesia

ARTICLE INFO

Article history:

Received: 12 Nov 2025
Revised: 25 Feb 2026
Accepted: 27 Feb 2026
Published online: 05 March 2026

Keywords:

Articulate Storyline;
Elementary School;
Science Learning

* *Corresponding author:*

E-mail: fitriyani170199@students.unnes.ac.id

Article Doi:

https://doi.org/10.31258/jes.10.3.p.23-39

This is an open access article under the CC BY-SA license.

A B S T R A C T

Technological developments have driven innovation in science education. One innovation in science education is the development of Articulate Storyline media. This study aims to analyze the novelty and findings of trends in the development of Articulate Storyline media in science education in elementary schools for the period 2020-2025. This study uses a systematic literature review method. Articles were searched through Publish or Perish from Google Scholar using the keywords "development" and "Articulate Storyline". The search yielded 28 articles from a total of 500 articles that matched the context of the title and abstract to be analyzed based on novelty and findings, thus revealing research opportunities. The novelty analysis results showed that there was integration of media with Problem Based Learning, Discovery Learning, Contextual Teaching and Learning, Culturally Responsive Teaching, Critical Thinking Skills, 21st Century Competencies, and STEM. The findings analysis results showed that there was effectiveness in learning outcomes, interest, concept understanding, science literacy, and critical thinking skills of students. In conclusion, this trend opens up opportunities for further research in developing Articulate Storyline media with more innovative integration to improve the learning needs of elementary school students.

1. Introduction

Rapid technological advances have opened up vast opportunities for innovation in various fields, especially in education (Çelik & Baturay, 2024). Technological advances in education have led to learning innovations that support active engagement, unlimited access to learning, and the development of students' potential (Okoye et al., 2023). According to Undang Undang Republik Indonesia Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional Indonesia, education is a conscious and planned effort to create a learning atmosphere in which students actively develop their potential in spiritual, self-control, personality, intelligence, noble character, and skills for the benefit of themselves, society, the nation, and the

state (Indonesia, 2003). According to Pristiwanti et al. (2022), education is a planned and systematic process to develop the potential, knowledge, skills, and character of individuals so that they are able to adapt and contribute to society. Education plays an important role in improving the quality of individuals, educating the nation, and advancing science and technology (Zaidah et al., 2023).

Technological developments pose significant challenges for teachers (Istiqomah & Na'imah, 2025). Teachers must quickly master digital skills, adapt teaching methods, and overcome limitations in facilities and infrastructure as well as additional workloads (Sari et al., 2025). Teachers are required not only to master the material, but also to be able to deliver learning that is interesting and meaningful for students (Sulistyorini et al., 2025). Teachers in science learning play an important role as facilitators who not only convey concepts, but also encourage student engagement through scientific activities and the use of digital technology to make learning more meaningful (Deehan & MacDonald, 2024).

Science education is a learning process that not only prioritizes the mastery of scientific concepts, but also develops scientific skills and attitudes through a systematic scientific approach based on direct experience (Akbar et al., 2025). Science education still faces limitations in terms of suboptimal facilities and infrastructure (Lestari et al., 2025). Science education in elementary schools also faces several challenges, such as limited media used by teachers, low student motivation, and difficulty in understanding scientific concepts (Ruliandari et al., 2025). Science education is often considered difficult by students because it contains abstract concepts that require concrete illustrations (Anggreni et al., 2025). Science learning is also less attractive to students, resulting in low motivation to learn science (Adrian et al., 2025). Low interest, motivation, and learning outcomes in science learning are caused by the use of monotonous conventional media (Pratama & Hasanah, 2024).

Conventional media refers to learning media that has long been used in the educational process, such as textbooks, blackboards, and worksheets (Yuniarti et al., 2023). These conventional media are less interactive and less interesting, resulting in lower student motivation compared to digital media (Prayoga et al., 2025). Digital media play an important role in improving the quality of education (Putra et al., 2024). Digital media has been proven effective in increasing student motivation and learning outcomes, as well as facilitating more flexible interactions (Raharjo et al., 2024). Digital media needs to be developed to create learning that is relevant to the needs and characteristics of students so that it becomes more effective and efficient (Purwanti et al., 2025).

One form of digital media development is the development of Articulate Storyline media. Articulate Storyline is an authoring tool software for creating interactive digital materials (Daryanes et al., 2023). Articulate Storyline media can integrate text, images, animations, audio, and even videos that can improve student understanding (Legina & Sari, 2022). In addition, Articulate Storyline is flexible and supports independent learning (Aanisah & Istianah, 2025). Another advantage of Articulate Storyline is that it is more appealing to students (Setiawan et al., 2025).

The use of Articulate Storyline makes the learning process more effective and enjoyable (Agustin & Zuhdi, 2021).

From 2020 to 2025, various studies have been conducted to develop Articulate Storyline media in science learning in elementary schools. Research by Nurmala et al. (2021) entitled "Pengembangan Media Articulate Storyline 3 pada Pembelajaran IPA Berbasis STEM untuk Mengembangkan Kreativitas Siswa SD/MI" shows that the integration of STEM is effective in increasing student creativity. Research by Damayanti et al. (2024) entitled "Pengembangan Multimedia Berbasis Articulate Storyline 3 Menggunakan Pendekatan *Contextual Teaching and Learning* (CTL) untuk Meningkatkan Hasil Belajar Siswa Kelas VI Sekolah Dasar" shows that the integration of the CTL approach is effective in improving student learning outcomes. The research by Wandani et al. (2024) entitled "Development of Articulate Storyline Interactive Media Based on Problem Based Learning in Science Learning in Class IV Primary School" shows that the integration of the PBL model is effective in improving student learning outcomes.

Based on the trends in the development of Articulate Storyline media, the following research questions arise: what innovations have been implemented in the development of Articulate Storyline media, and what findings have been reported in the development of Articulate Storyline media for science education in elementary schools during the 2020–2025 period. This study is expected to provide new insights and serve as a reference for the development of digital media in elementary science learning. Therefore, the purpose of this study is to analyze the novelty and research findings related to the development of Articulate Storyline media in science learning in elementary schools from 2020 to 2025.

2. Methodology

This study used a Systematic Literature Review (SLR). A systematic literature review was chosen because it helps researchers identify research gaps so that they can formulate original and relevant research questions (Bahishti, 2021). The primary instrument used in this review was the Publish or Perish (PoP) software, which was utilized to retrieve articles from Google Scholar databases. Data collection was conducted through a systematic search in Google Scholar using Publish or Perish (PoP) with the keywords "development" and "Articulate Storyline". The search was limited to articles published between 2020 and 2025. The initial article search was conducted using 500 articles. Data analysis was conducted systematically in four stages, namely 1) Article identification, 2) Article screening, 3) Article feasibility, and 4) Article verification (Indiri et al., 2025). Based on Table 1, the inclusion and exclusion criteria used in the article selection process. The inclusion criteria include articles published in reputable scientific journals and published between 2020 and 2025. The selection process applied the following inclusion and exclusion criteria, as shown in Table 1 below.

Table 1. Inclusion and Exclusion Criteria

Aspects	Inclusion	Exclusion
Type of Publication	Scientific journal articles	Proceedings, undergraduate theses, master's theses, doctoral dissertations
Year of Publication	2020-2025	Before 2020
Research Subject	Science learning in elementary schools	Science learning in junior high schools, high schools, or universities
Research Topic	Development of Articulate Storyline Media	Not Development of Articulate Storyline Media
Language	Indonesian and English	Languages other than Indonesian and English
Research Type	Empirical research	Opinion articles, editorials, or non-systematic reviews
Text Access	Full text accessible	Full text not accessible

In addition, articles must focus on science learning in elementary schools with the main topic of Articulate Storyline media development. The articles used are also limited to Indonesian and English and must be empirical research. Meanwhile, articles that do not meet these criteria or are not fully accessible (full-text) will be eliminated from further analysis. After determining the inclusion and exclusion criteria, data analysis was performed, as shown in Figure 1 below.

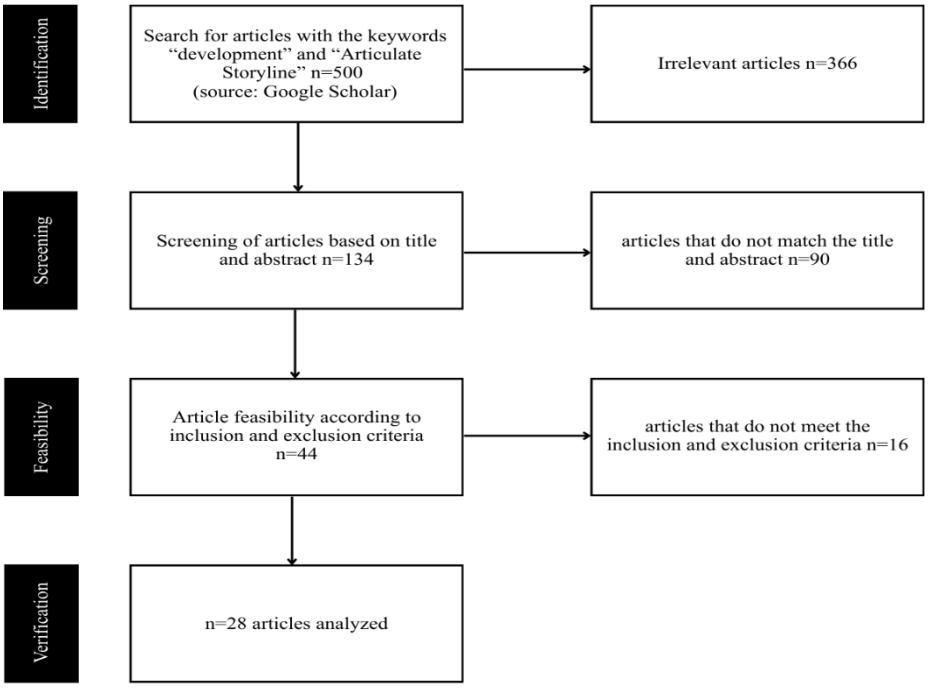

Figure 1. Stages of data analysis

Based on Figure 1, data analysis was conducted in four stages. In the first stage, articles were identified using Publish or Perish software on the Google Scholar database with the keywords "development" and "Articulate Storyline" from 2020

to 2025, yielding 500 articles. The second stage involved screening articles based on their titles and abstracts, resulting in 134 relevant articles and eliminating 366 articles that were not relevant to the research topic. The third stage involved assessing the suitability of articles according to inclusion and exclusion criteria, leaving 44 articles and removing 16 articles that did not meet these criteria. The fourth stage involved final verification of the eligible articles, resulting in 28 articles that were analyzed in depth as the main data sources for the study.

3. Results and Discussion

Based on the data obtained, there were 28 articles relevant to the research topic. Furthermore, these articles were analyzed in depth to identify the novelty and research findings on the development trends of Articulate Storyline media in science learning in elementary schools for the period 2020-2025, thereby providing an overview of opportunities for further research on the development of Articulate Storyline media. The results of the study obtained various novelties related to publication trends, classes, materials, integration, and research focus on trends in the development of Articulate Storyline media in science learning in elementary schools for the period 2020-2025. The research results began with a publication on the development of Articulate Storyline media, as shown in Figure 1 below.

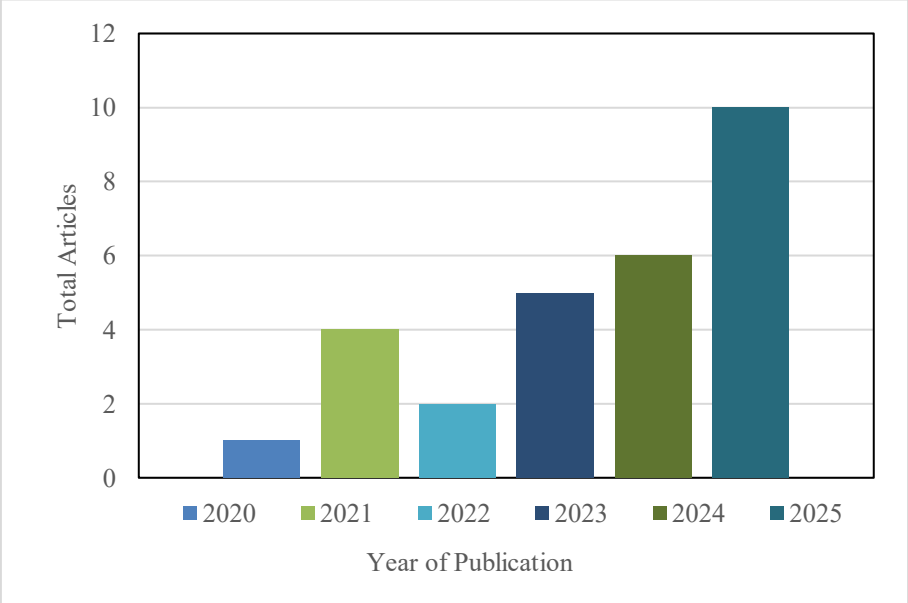

Figure 2. Publication in the development of Articulate Storyline media

Based on Figure 2, the number of publications on Articulate Storyline media development has shown a general upward trajectory across the five-year span. This increase suggests a strengthening awareness among educators and academic communities regarding the importance of multimedia interactivity in science learning. The trend reflects how technological familiarity after the pandemic period has encouraged more innovative instructional designs within elementary classrooms. Articulate Storyline is increasingly recognized as offering accessible

authoring features that align well with the digital competencies promoted in the Kurikulum Merdeka. Although minor fluctuations occurred in certain years, the overall pattern demonstrates sustained scholarly interest, indicating that this media is perceived as relevant to contemporary educational challenges. The implications of this growth are significant, as it opens broader opportunities for more specialized and theory-driven investigations in the coming years. In addition to publication trends, variations were also identified in terms of the elementary grade levels targeted for media development, as shown in Figure 3 below.

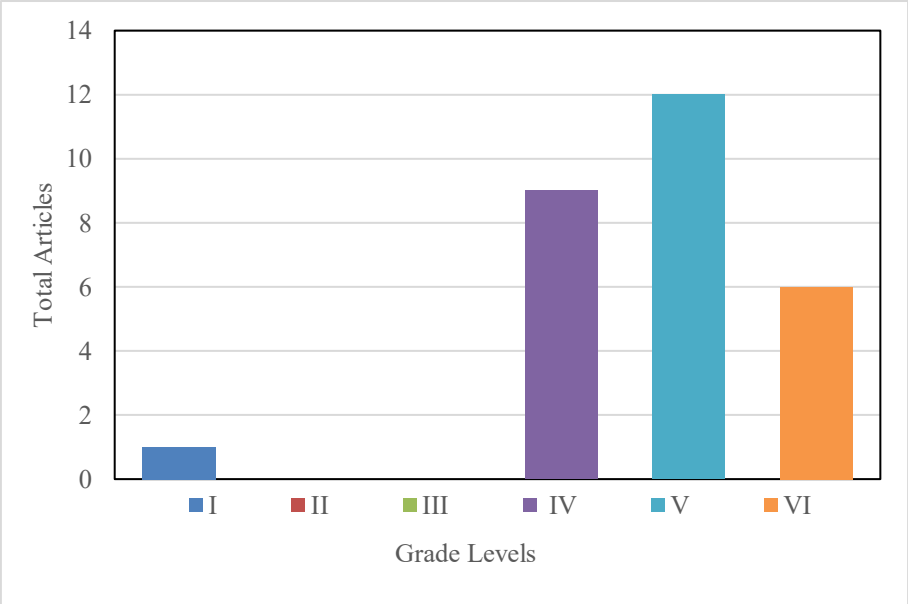

Figure 3. Class levels in the development of Articulate Storyline media

Based on Figure 3, reveals that most developments were conducted in upper elementary grades. The dominance in Class V followed by Classes IV and VI indicates a tendency to focus on levels where science concepts become more abstract and complex. This focus can be explained by the need for richer visualization and simulation support in higher grades. Articulate Storyline is considered particularly helpful at these levels because it enables integration of animations, quizzes, and interactive scenarios that facilitate conceptual understanding. Meanwhile, the absence of studies in Classes II and III suggests that early-grade science learning has not yet been widely explored using this platform. The findings imply that future media development should not be limited to upper grades, as lower grades could also benefit from age-appropriate interactive media. After identifying class distribution, the analysis continued to the types of science materials used in the selected studies, as shown in Table 2 below. Based on Table 2, the development of Articulate Storyline media has been developed for a wide range of science topics. The most frequently chosen materials relate to the human body system and local wisdom themes. This tendency indicates a priority on materials requiring detailed processes and contextual relevance. Uneven representation appears as many other science materials were covered by only one article each, reflecting limited and imbalanced exploration.

Table 2. Materials in the development of Articulate Storyline media

Science Learning Materials	Class	Total Articles
Human Respiratory System	V	3
Local Wisdom in Indonesia	IV	3
Human Digestive System	V	2
Ecosystem	V	2
Solar System	VI	2
Adaptation of Living Things	VI	2
Others	Others	Others

This condition demonstrates how the current trend remains concentrated on familiar core topics rather than on emerging or less popular themes. The implication is that Articulate Storyline has not yet reached its full potential in representing diverse scientific domains. Consequently, substantial room remains to design media for physics or environmental science topics that demand interactive experimentation and richer simulation support. Beyond materials, the articles were also analyzed based on pedagogical integration, as shown in Table 3 below.

Table 3. Integration in the development of Articulate Storyline media

Aspects	Integration	Total Articles
Without Integration	Development Focus	17
Learning Model	Problem Based Learning (PBL), Discovery Learning, Culturally Responsive Teaching (CRT), Contextual Teaching and Learning (CTL)	7
Skills Approach	Science Literacy, Critical Thinking Skills, and 21st Century Competencies	3
STEM Approach	STEM	1

Based on Table 3, indicates that the majority of studies still positioned Articulate Storyline primarily as a product development initiative without explicit theoretical integration. This pattern shows that early research on this media is largely technology-oriented rather than pedagogy-oriented. Nevertheless, several articles have begun integrating structured learning models such as PBL, Discovery Learning, CRT, and CTL. This integration reflects a gradual shift toward explaining not only how to build media but also how to embed it within meaningful instructional frameworks. The limited number of studies using skills or STEM integration implies that theoretical applications remain underutilized. These findings highlight the need for stronger conceptual alignment between multimedia development and learning theories. The implication is that future research should more explicitly address how Articulate Storyline can support higher-order thinking processes.

Based on Figure 4, demonstrates that most studies relied on validation from media experts and subject matter experts. This dominance can be explained by the technical nature of multimedia products, where visual design and material accuracy are seen as primary determinants. However, fewer articles included language experts or learning design experts. This condition suggests that researchers still consider linguistic and instructional flow aspects as secondary. The analysis then proceeded to examine trends in product feasibility, as shown in Figure 4 below.

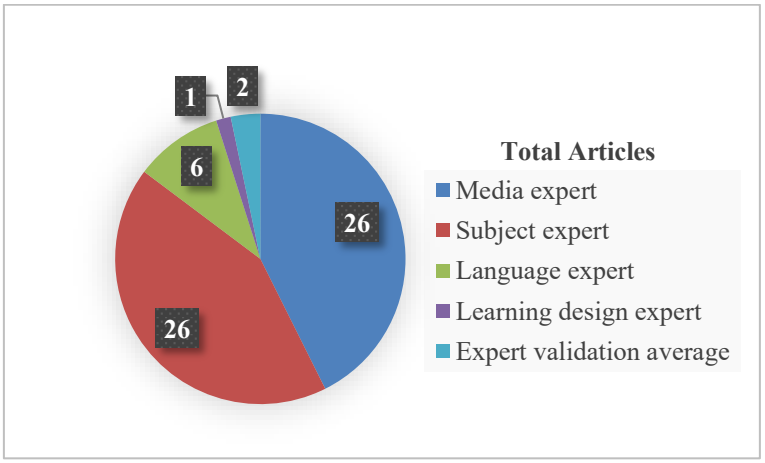

Figure 4. Feasibility in the development of Articulate Storyline media

In fact, from a theoretical perspective, clarity of language and instructional coherence play crucial roles in multimedia comprehension. The implication is that feasibility assessments need to adopt more holistic criteria involving multiple fields of expertise. Strengthening these aspects would ensure that Articulate Storyline products better support cognitive load principles and meaningful learning. Furthermore, product practicality was also analyzed to understand how the media functions in real classroom contexts, as shown in Figure 5 below.

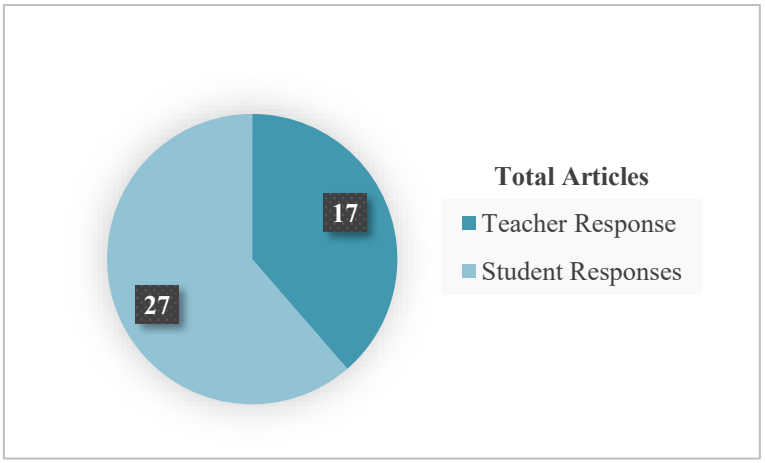

Figure 5. Practicality in the development of Articulate Storyline media

Based on Figure 5, reveals that more attention was given to student responses than teacher responses. This trend indicates that researchers emphasize the learners' perspective as direct users of the media. The condition can be explained by the interactive characteristics of Articulate Storyline, which are immediately experienced by students through engagement and ease of use. However, the smaller portion of teacher responses suggests that classroom implementation issues have not yet been fully explored. Teachers play strategic roles in determining how media is integrated with lesson objectives, time allocation, and assessment strategies. Therefore, the implication is that future investigations should analyze more deeply how teachers perceive challenges in using this platform. A balanced practicality

evaluation would provide richer theoretical insights into technology acceptance among educators. Finally, the aspect of product effectiveness was examined, as shown in Figure 6 below.

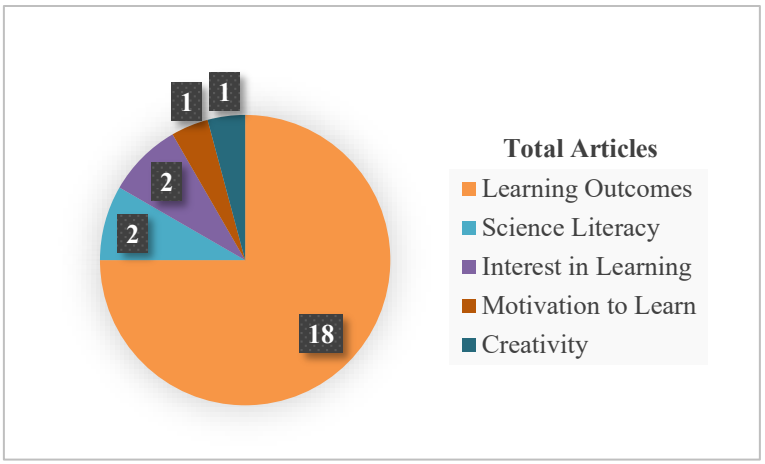

Figure 6. Effectiveness in the development of Articulate Storyline media

Based on Figure 6, the data show that most articles measured success through improvements in cognitive learning outcomes. This focus can be explained by the traditional orientation that prioritizes measurable achievement scores. However, only a few studies investigated affective outcomes such as learning interest, motivation, creativity, or science literacy. This condition indicates that the influence of Articulate Storyline on non-cognitive dimensions of learning has not yet been fully analyzed. From a theoretical viewpoint, multimedia learning works not only through information delivery but also through emotional engagement and learner motivation. The implication is that future research should more explicitly explore the underlying "how" mechanism behind these influences, for instance through gamification features or interactive storytelling. Expanding effectiveness criteria would contribute to more comprehensive theoretical models on multimedia impact in elementary science education. After mapping trends and gaps, the findings were further strengthened through analytical synthesis across all reviewed studies.

Based on an analysis of 28 articles, Articulate Storyline-based learning media has been proven to be feasible and practical for use in science education in elementary schools. Expert validation results show scores above 85%, as found by Aanisah & Istianah (2025), Amir et al. (2025), and Angginta et al. (2025), indicating high feasibility in terms of media and material. Similar findings were also reinforced by Faiz et al. (2025) and Herdianto et al., (2025), who reported positive responses from teachers and students with an average response above 90%. Research by Kurniawan et al. (2025) and Nisa' & Yulianto (2025) proves that this media is effective in improving learning outcomes with an N-Gain value of 0.50-0.76. In general, these studies confirm that Articulate Storyline media is suitable for use as innovative media that can facilitate interactive and interesting science learning.

Research by Amelia & Mintohari (2024) and Auvisena & Faturrahman (2024) shows a significant increase in cognitive learning outcomes after the application of this media, marked by a high difference in pretest and posttest scores. Research by Damayanti et al. (2024) and Khairatunnisa & Fitria (2024) confirms the effectiveness of this media through the CTL approach, which makes it easier for students to understand the concepts of adaptation in living things and the human digestive system. Meanwhile, Rofiah et al. (2024) showed that this media is also effective in improving thematic learning outcomes with contextual visual and animation support. Wandani et al. (2024) proved an increase in understanding of energy concepts through the Problem-Based Learning model. These findings reinforce that Articulate Storyline media can improve mastery of science concepts through strong interactivity and visualization.

Research by Ayudianti et al. (2023) and Hidayah et al. (2023) highlights the importance of integrating contextual learning models and increasing student interest in learning. Maivi & Erita, (2023), through the Discovery Learning approach, show that Articulate Storyline media can increase activity and conceptual understanding. Ramadhan & Suprayitno (2023) and Walidah & Zuhdi (2023) also prove that learning outcomes improve with a completion rate of over 77%. Research by Budiarto & Jazuli (2022) and Legina & Sari (2022) adds that this media not only improves achievement but also students' motivation and critical thinking skills. These findings show a transition from a focus on development to the achievement of more complex affective and cognitive aspects.

In 2020-2022, research showed important foundations in the early stages of Articulate Storyline media development research. Arwanda et al. (2020) demonstrated the effectiveness of Articulate Storyline media based on 21st-century competencies that are in line with the 2013 curriculum. Safira et al. (2021) developed media with a feasibility score above 94%, strengthening the evidence of the feasibility of Articulate Storyline media. Agustin & Zuhdi (2021) proved an increase in science learning outcomes with a completion rate of 100%. Research by Hidayanti et al. (2021) showed a significant increase in student science literacy with a t-test < 0.05. Nurmala et al. (2021) added new opportunities with a STEM approach that has been proven to increase student creativity.

In 2023-2025, research began to incorporate innovation into the media. Faiz et al. (2025) and Auvisena & Faturrahman (2024) integrated the Culturally Responsive Teaching approach to improve the relevance of learning to the regional context. Additionally, Habibatuzzahro' & Istianah (2025) focused on improving science literacy, while Setiawan et al. (2025) showed a significant increase in student interest in learning. Research by Syadiah & Sukmawarti (2025) shows an increase in understanding of ecosystem concepts. These findings indicate that the development of Articulate Storyline media is no longer solely focused on development but also leads to contextual, meaningful, and student-centered learning.

The effectiveness of Articulate Storyline media has also been consistently found in various studies. Herdianto et al., 2025 proved a significant increase in

understanding of environmental concepts. Angginta et al. (2025) proved that this media is effective in Indonesian cultural material with an N-Gain of 0.64. Kurniawan et al. (2025) and Nisa' & Yulianto (2025) demonstrated the effectiveness of media in solar system and earth structure material. Meanwhile, Aanisah & Istianah (2025) and Amir et al. (2025) demonstrated the effectiveness of this media in improving learning outcomes in the respiratory system and animal life cycle with 100% mastery. These findings show that Articulate Storyline media is effective when applied at various levels and in various science subjects.

The development of Articulate Storyline media emphasizes the importance of the role of media experts, materials, and language. Rofiah et al. (2024) and Khairatunnisa & Fitria (2024) show that the synergy of these three aspects can increase visual appeal and ease of understanding for students. Research by Damayanti et al. (2024) and Wandani et al., (2024) also emphasizes that the collaboration of these three aspects enriches the contextual and communicative content of media. Meanwhile, Safira et al. (2021) added the aspect of learning design experts who play a role in arranging the flow, appearance, and interactivity of media to suit the learning process. These findings confirm that the development of Articulate Storyline media requires collaboration between complementary fields of expertise.

Overall, the synthesis of 28 studies shows that Articulate Storyline media has been proven to be feasible, practical, and effective in improving the quality of science learning in elementary schools. All studies show significant improvements in learning outcomes, motivation, interest, science literacy, and critical thinking skills among students. The integration of various models and approaches such as Problem-Based Learning, Discovery Learning, Contextual Teaching and Learning, Culturally Responsive Teaching, Science Literacy, Critical Thinking Skills, 21st Century Competencies, and STEM strengthens the effectiveness of the media in creating interactive and meaningful learning experiences. Furthermore, the successful application of this media at various levels and in various science subjects shows that Articulate Storyline media is flexible and relevant to be applied according to curriculum needs and student characteristics. Thus, the trend of developing Articulate Storyline media plays an important role in supporting digital transformation and strengthening 21st-century learning in elementary schools.

The findings from various studies show that the development of Articulate Storyline media has broad opportunities to continue to be developed innovatively and contextually. Future research can focus on integrating Articulate Storyline media with various innovative models or approaches such as Project Based Learning, Game Based Learning, Science Process Skills, or others to meet the needs of students. In addition, the development of media that focuses on improving students' scientific attitudes also needs to be developed so that learning does not only emphasize cognitive aspects, but also shapes scientific characters such as curiosity, responsibility, and critical thinking. Thus, further research on the development of Articulate Storyline media is expected to create more innovative, effective, and meaningful science learning in accordance with the learning needs of the 21st century.

4. Conclusion

Based on the results and discussions, this study answers the research question regarding how Articulate Storyline media has been developed and utilized in elementary school science education during the 2020–2025 period. The review shows that the development of Articulate Storyline media is generally successful in producing learning media that is feasible in content and design, practical to implement in classrooms, and effective in supporting science learning. Current research trends indicate that most developments emphasize the improvement of students' cognitive learning outcomes through interactive digital presentations. Several studies also demonstrate success in enhancing learning motivation, interest, and higher-order thinking abilities, proving that this media can function as an innovative instructional tool. Furthermore, the integration of Articulate Storyline with various learning models and approaches has been widely explored. These combinations help teachers present science materials in more contextual, student-centered, and technology-based ways. The trend reflects positive progress rather than failure, as the media continues to adapt to the needs of digital-age learners. However, opportunities for future research remain extensive. Further studies are expected to explore underrepresented science topics and broaden the focus on non-cognitive aspects such as scientific attitudes and character building. Expanding integration with approaches like Project-Based Learning, Game-Based Learning, and Science Process Skills is also recommended. Strengthening collaboration among media, material, and language experts will be essential to ensure continuous improvement in media quality. Therefore, the development of Articulate Storyline media is anticipated to continue addressing the challenges of science education in an innovative and contextual manner.

Acknowledgement

The author would like to express his gratitude to all those who have helped in the preparation of this article. Special thanks go to all lecturers of the Scientific Work in the Elementary Education Study Program, Postgraduate School, Universitas Negeri Semarang. The guidance, direction, and knowledge they have provided have been invaluable in the preparation of this article. The author hopes that this article will be useful for educators, researchers, and other parties involved in the development of innovative learning media in elementary schools.

References

Aanisah, N., & Istianah, F. (2025). Pengembangan Media Interaktif "SISPA" Berbasis Articulate Storyline Materi Sistem Pernapasan Manusia untuk Meningkatkan Hasil Belajar di Sekolah Dasar. *Jurnal Penelitian Pendidikan Guru Sekolah Dasar (JPPGSD)*, *13*(7), 1780–1795. https://ejournal.unesa.ac.id/index.php/jurnal-penelitian-pgsd/article/view/70399

Adrian, K. B., Ismail, A., & Aah Ahmad Syahid. (2025). Analisis Kesulitan Belajar Siswa dalam Pembelajaran IPA Kelas V di Sekolah Dasar. *Al-Madrasah:*

Jurnal Ilmiah Pendidikan Madrasah Ibtidaiyah, *9*(3), 1442–1457. https://doi.org/10.35931/am.v9i3.5123

Agustin, M. D., & Zuhdi, U. (2021). Pengembangan Media Pembelajaran Interaktif Menggunakan Articulate Storyline 3 pada Materi Sifat dan Perubahan Wujud Benda untuk Meningkatkan Hasil Belajar Siswa Kelas V SD. *Jurnal Pendidikan Guru Sekolah Dasar (JPGSD)*, *9*(8), 3039–3102. https://ejournal.unesa.ac.id/index.php/jurnal-penelitian-pgsd/article/view/42320

Akbar, A. R. M., Khairunnisa, A., Sari, I. P., Atsir, M. R., Gumelar, R. C., Budiargo, W. F., & Sukmawati, W. (2025). Hakikat Pendidikan IPA. *Algoritma: Jurnal Matematika, Ilmu Pengetahuan Alam, Kebumian dan Angkasa*, *3*(1), 235–245. https://doi.org/10.62383/algoritma.v3i1.395

Amelia, B. N., & Mintohari, M. (2024). Pengembangan Media Interaktif Berbasis Articulate Storyline 3 untuk Meningkatkan Hasil Belajar Siswa pada Materi Sistem Pencernaan Manusia Kelas V Sekolah Dasar. *Jurnal Penelitian Pendidikan Guru Sekolah Dasar (JPPGSD)*, *12*(3), 360–369. https://ejournal.unesa.ac.id/index.php/jurnal-penelitian-pgsd/article/view/60011

Amir, Z. A., Makmun, M., Iksam, I., & Sukriadi, S. (2025). Pengembangan ASDAHIWA sebagai Media Pembelajaran Berbasis Articulate Storyline Materi Daur Hidup Hewan di Kelas IV Sekolah Dasar. *Pendas : Jurnal Ilmiah Pendidikan Dasar*, *10*(03), 210–224. https://journal.unpas.ac.id/index.php/pendas/article/view/29308

Angginta, T., Simanihuruk, L., Lubis, W., Winara, W., & Afriadi, P. (2025). Pengembangan Media Pembelajaran Interaktif Berbasis Articulate Storyline pada Mata Pelajaran IPAS Kelas IV SDN 106806 Cinta Rakyat. *Jurnal Ilmiah Pendidikan Dasar (JIPDAS)*, *5*(2), 1625–1639. https://jurnal.spada.ipts.ac.id/index.php/JIPDAS/article/view/2921

Anggreni, Y., Abdullah, G., Husain, F. A., Kalui, S. N. S., Khairunnisa, S. K., Haleda, H., & Baraka, F. H. (2025). Analisis Problematika Proses Pembelajaran IPA di SD. *Knowledge: Jurnal Inovasi Hasil Penelitian dan Pengembangan*, *5*(2), 545–551. https://doi.org/10.51878/knowledge.v5i2.6026

Arwanda, P., Irianto, S., & Andriani, A. (2020). Pengembangan Media Pembelajaran Articulate Storyline Kurikulum 2013 Berbasis Kompetensi Peserta Didik Abad 21 Tema 7 Kelas IV Sekolah Dasar. *Al-Madrasah: Jurnal Pendidikan Madrasah Ibtidaiyah*, *4*(2), 193–204. https://doi.org/10.35931/am.v4i2.331

Auvisena, A. U., & Faturrahman, M. (2024). Development of Android-Based Interactive Media Articulate Storyline 3 in IPAS Subjects Fourth Grade. *Jurnal Penelitian Pendidikan IPA (JPPIPA)*, *10*(7), 4040–4047. https://doi.org/10.29303/jppipa.v10i7.7487

Ayudianti, Y. N., Andriana, E., Sigit Setiawan, & Yuliana, R. (2023). Pengembangan Media Pembelajaran Interaktif Articulate Storyline 3 Berbasis Model Pembelajaran Kontekstual di Kelas IV SD. *Vox Edukasi: Jurnal Ilmiah Ilmu Pendidikan*, *14*(1), 131–141. https://doi.org/10.31932/ve.v14i1.2007

Bahishti, A. A. (2021). The Importance of Review Articles & its Prospects in

Scholarly Literature. *Extensive Reviews*, *1*(1), 1–6. https://doi.org/10.21467/exr.1.1.4293

Budiarto, F., & Jazuli, A. (2022). Pengembangan Multimedia Pembelajaran Interaktif Berbasis Articulate Storyline 3 sebagai Upaya Peningkatan Motivasi dan Prestasi Belajar IPA Siswa Kelas VI Sekolah Dasar. *Must: Journal of Mathematics Education, Science and Technology*, *7*(1), 50–61. https://doi.org/10.30651/must.v7i1.13919

Çelik, F., & Baturay, M. H. (2024). Technology and Innovation in Shaping the Future of Education. *Smart Learning Environments*, *11*(1). https://doi.org/10.1186/s40561-024-00339-0

Damayanti, I. D., Prastowo, S. H. B., & Budiastra, A. A. K. (2024). Pengembangan Multimedia Berbasis Articulate Storyline 3 Menggunakan Pendekatan Contextual Teaching and Learning (CTL) untuk Meningkatkan Hasil Belajar Siswa Kelas VI Sekolah Dasar. *ELSE (Elementary School Education Journal)*, *8*(3), 253–261. https://doi.org/10.30651/else.v8i3.24709

Daryanes, F., Darmadi, & Febrita, E. (2023). Need Analysis for Development of Articulate Storyline-Based Interactive Learning Media During the Covid-19 Pandemic. *Atlantis Press: Proceedings of the 4th International Conference on Progressive Education (ICOPE)*, 167–176. https://doi.org/10.2991/978-2-38476-060-2_17

Deehan, J., & MacDonald, A. (2024). Australian Teachers' Views on How Primary Science Education Can Be Improved. *Australian Educational Researcher*, *51*(4), 1255–1272. https://doi.org/10.1007/s13384-023-00638-4

Faiz, M., Dewi, R. S., & Sari, I. J. (2025). Development of Interactive Media Using Articulate Storyline Based on Banten Local to Improve IPAS Learning Outcomes of Elementary School Student. *Journal of Educational Sciences*, *9*(3), 1667–1677. https://doi.org/10.31258/jes.9.3.p.1667-1677

Habibatuzzahro', L., & Istianah, F. (2025). Pengembangan Multimedia Interaktif Berbasis Articulate Storyline 3 untuk Meningkatkan Kemampuan Literasi Sains pada Materi Perkembangbiakan Tumbuhan Kelas IV Sekolah Dasar. *Jurnal Penelitian Pendidikan Guru Sekolah Dasar (JPPGSD)*, *13*(2), 453–467. https://ejournal.unesa.ac.id/index.php/jurnal-penelitian-pgsd/article/view/67725

Herdianto, R. S., Aka, K. A., & Damariswara, R. (2025). Pengembangan Multimedia Interaktif Berbasis Articulate Storyline 3 pada Pembelajaran IPA Materi Memelihara Lingkungan Siswa Kelas 1 SD Negeri Tempel Wetan. *Prosiding SEMDIKJAR (Seminar Nasional Pendidikan Dan Pembelajaran)*, *8*, 2070–2081. https://proceeding.unpkediri.ac.id/index.php/semdikjar/article/view/8670

Hidayah, N., Nafitri, S. E., Zaky, F., & A.F. Suryaning Ati MZ. (2023). Pengembangan Media Interaktif Menggunakan Aplikasi Articulate Storyline Sebagai Media Pembelajaran IPA di Sekolah Dasar. *Pendagogia: Jurnal Pendidikan Dasar*, *3*(2), 83–91. https://jurnal.educ3.org/index.php/pendagogia/article/view/137

Hidayanti, I., Sutisnawati, A., & Uswatun, D. A. (2021). Pengembangan Media Pembelajaran Berbasis Articulate Storyline untuk Meningkatkan Literasi Sains pada Siswa SD Kelas Tinggi. *DIKDAS MATAPPA: Jurnal Ilmu*

Pendidikan Dasar, *4*(3), 539–546. https://journal.matappa.ac.id/index.php/dikdas/article/view/1255

Indiri, S., Avrillianda, D., & Ellianawati, E. (2025). Ethnomathematics Comic Media in Primary Mathematics Learning: a Review of Research Trends (2019–2025). *Jurnal Cakrawala Pendas (JCP)*, *11*(3), 704–715. https://doi.org/10.31949/jcp.v11i3.13874

Indonesia. (2003). Undang Undang Republik Indonesia Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional. *Lembaran Negara Republik Indonesia Tahun 2003 Nomor 20*.

Istiqomah, N., & Na'imah, N. (2025). Education Transformation: Paradigm Shifts in Learning in the Age of Technology. *Journal of Educational Sciences*, *9*(3), 1546–1557. https://doi.org/10.31258/jes.9.3.p.1546-1557

Khairatunnisa, A., & Fitria, Y. (2024). Pengembangan Multimedia Interaktif Berbantuan Aplikasi Articulate Storyline 3 pada Pembelajaran IPAS untuk Kelas V Sekolah Dasar. *Didaktik : Jurnal Ilmiah PGSD FKIP Universitas Mandiri*, *10*(3), 317–332. https://journal.stkipsubang.ac.id/index.php/didaktik/article/view/3844

Kurniawan, D., Supriyono, S., & Aisyah, S. (2025). Development of Interactive Learning Media Articulate Storyline 3 on Solar System to Improve Learning Achievement of Grade VI Elementary School Students. *ISCE: Journal of Innovative Studies on Character and Education*, *9*(1), 148–163. https://www.iscjournal.com/index.php/isce/article/view/283

Legina, N., & Sari, P. M. (2022). Pengembangan Media Pembelajaran Interaktif Articulate Storyline Berbasis Keterampilan Berpikir Kritis pada Pembelajaran IPA bagi Siswa Sekolah Dasar. *Jurnal Paedagogy: Jurnal Penelitian Dan Pengembangan Pendidikan*, *9*(3), 375. https://doi.org/10.33394/jp.v9i3.5285

Lestari, Y., Gagaramusu, Y., Nuraini, N., Zulnuraini, Z., & Khairunnisa, K. (2025). The Relationship Between the Completeness of School Facilities and Infrastructure and the Learning Achievement of Elementary School Students. *Journal of Educational Sciences*, *9*(4), 1880–1888. https://doi.org/10.31258/jes.9.4.p.1880-1888

Maivi, C., & Erita, Y. (2023). Pengembangan Media Pembelajaran IPAS Menggunakan Articulate Storyline 3 Berbasis Discovery Learning di Kelas IV Sekolah Dasar. *Innovative: Journal Of Social Science Research*, *3*(2), 1188–1198. https://j-innovative.org/index.php/Innovative/article/view/418

Nisa', S., & Yulianto, S. (2025). Development of Interactive Media Articulate Storyline 3 on Earth Structure Material to Improve Elementary School Students' Science Learning Outcomes. *Jurnal Penelitian Pendidikan IPA*, *11*(4), 714–723. https://doi.org/10.29303/jppipa.v11i4.10717

Nurmala, S., Triwoelandari, R., & Fahri, M. (2021). Pengembangan Media Articulate Storyline 3 pada Pembelajaran IPA Berbasis STEM untuk Mengembangkan Kreativitas Siswa SD/MI. *Jurnal Basicedu*, *5*(6), 5024–5034. https://doi.org/10.31004/basicedu.v5i6.1546

Okoye, K., Hussein, H., Arrona-Palacios, A., Quintero, H. N., Ortega, L. O. P., Sanchez, A. L., Ortiz, E. A., Escamilla, J., & Hosseini, S. (2023). Impact of Digital Technologies Upon Teaching and Learning in Higher Education in Latin America: an Outlook on The Reach, Barriers, and Bottlenecks.

Education and Information Technologies, *28*(2), 2291–2360. https://doi.org/10.1007/s10639-022-11214-1

Pratama, M. P., & Hasanah, F. N. (2024). Pengaruh Media Pembelajaran Interaktif Terhadap Minat Belajar Siswa Mata Pelajaran IPA Sekolah Dasar. *Khatulistiwa: Jurnal Pendidikan dan Sosial Humaniora*, *6*(1), 1–6. https://doi.org/10.29100/.v6i1.4454

Prayoga, B. G., Wardani, S., Harniangsih, H., Subali, B., & Widiati, N. (2025). Literature Review on the Application of Interactive Media in Science Learning in Elementary Schools for the Period 2020-2025. *Journal of Educational Sciences*, *9*(4), 2085–2100. https://doi.org/10.31258/jes.9.4.p.2084-2100

Pristiwanti, D., Badariah, B., Hidayat, S., & Dewi, R. S. (2022). Pengertian Pendidikan. *Jurnal Pendidikan dan Konseling*, *4*(6), 7911–7915. https://journal.universitaspahlawan.ac.id/index.php/jpdk/article/view/9498

Purwanti, P., Muksar, M., & Rufiana, I. S. (2025). Analisis Kebutuhan Pengembangan Media Pembelajaran di SD pada Kurikulum Merdeka. *Briliant: Jurnal Riset dan Konseptual*, *10*(1), 107–116. https://jurnal.unublitar.ac.id/index.php/briliant/article/view/1872

Putra, J. E., Sobandi, A., & Aisah, A. (2024). The Urgency of Digital Technology in Education: a Systematic Literature Review. *Jurnal EDUCATIO: Jurnal Pendidikan Indonesia*, *10*(1), 224. https://doi.org/10.29210/1202423960

Raharjo, R., Wiyati, I., Santoso, S., & Rondlim, W. S. (2024). Efektivitas Penggunaan Media Pembelajaran Digital dalam Meningkatkan Minat dan Hasil Belajar Siswa SDN 1 Sarirejo. *Jurnal Guru Sekolah Dasar (JGSD)*, *2*(1), 70–80. https://doi.org/10.70277/jgsd.v2i1.5

Ramadhan, L. A. P., & Suprayitno. (2023). Pengembangan Multimedia Pembelajaran Interaktif berbasis Articulate Storyline 3 pada Materi Sistem Tata Surya kelas VI Sekolah Dasar. *Jurnal Pendidikan Guru Sekolah Dasar (JPGSD)*, *11*(08), 1794–1806. https://ejournal.unesa.ac.id/index.php/jurnal-penelitian-pgsd/article/view/54374

Rofiah, N. H., Sinta, T. N. A., & Dewi, R. (2024). Development of Articulate Storyline Media for Enhancing Learning Outcomes in Natural and Social Sciences Among Elementary School Students. *Al-Bidayah : Jurnal Pendidikan Dasar Islam*, *16*(1), 19–40. https://doi.org/10.14421/al-bidayah.v16i1.9559

Ruliandari, L., Sari, M., Nopitasari, Alfiana, R., Shafitri, N. M., & Khoirunnisa. (2025). Analisis Tantangan dan Strategi Guru dalam Implementasi Kurikulum Merdeka pada Pembelajaran IPA di SD. *Journal Of Social Science Research*, *5*(2), 3129–3139. https://j-innovative.org/index.php/Innovative/article/view/18749

Safira, A. D., Sarifah, I., & Sekaringtyas, T. (2021). Pengembangan Media Pembelajaran Interaktif Berbasis Web Articulate Storyline pada Pembelajaran IPA di Kelas V Sekolah Dasar. *Prima Magistra: Jurnal Ilmiah Kependidikan*, *2*(2), 237–253. https://e-journal.uniflor.ac.id/index.php/jpm/article/view/1109

Sari, Y., Istiqfaroh, N., Sukartiningsih, W., & Mariana, N. (2025). Exploring the Role of Digital Libraries in Primary Schools in the Era of Digitalization: a

Systematic Literature Review. *Journal of Educational Sciences*, *9*(3), 1034–1046. https://doi.org/10.31258/jes.9.3.p.1034-1046

Setiawan, A. Y., Agustini, F., & Sulianto, J. (2025). Pengembangan Media SIPERMAN Berbasis Articulate Storyline Materi Sistem Pernapasan Manusia untuk Meningkatkan Minat Belajar IPAS Siswa Kelas V Sekolah Dasar. *Jurnal Wawasan Pendidikan*, *5*(2), 694–708. https://journal.upgris.ac.id/index.php/wp/article/view/22945

Sulistyorini, E. M., Maryanto, M., & Abdullah, G. (2025). The Influence of Transformational Leadership, Academic Supervision, and Teachers' Pedagogical Competence on the Quality of Education: a Quantitative Study in Public Elementary Schools. *Journal of Educational Sciences*, *9*(6), 5946–5958. https://doi.org/10.31258/jes.9.6.p.5946-5958

Syadiah, H., & Sukmawarti, S. (2025). Pengembangan Media Storyline untuk Pemahaman Konsep Siswa pada Pembelajaran IPAS Materi Ekosistem di kelas V SD. *Didaktik : Jurnal Ilmiah PGSD FKIP Universitas Mandiri*, *11*(01), 212–222. https://journal.stkipsubang.ac.id/index.php/didaktik/article/view/5782

Walidah, S. N. S. Z., & Zuhdi, U. (2023). Pengembangan Media Pembelajaran Interaktif Articulate Storyline pada Materi Mengubah Bentuk Energi Kelas IV Sekolah Dasar. *Jurnal Pendidikan Guru Sekolah Dasar (JPGSD)*, *11*(1), 32–41. https://ejournal.unesa.ac.id/index.php/jurnal-penelitian-pgsd/article/view/52481

Wandani, F. A. M., Yarmi, G., & Supriatna, A. R. (2024). Development of Articulate Storyline Interactive Media Based on Problem Based Learning in Science Learning in Class IV Primary School. *ETJ: Educational Technology Journal*, *4*(1), 35–41. https://journal.unesa.ac.id/index.php/etj/article/view/26533

Yuniarti, A., Titin, T., Safarini, F., Rahmadia, I., & Putri, S. (2023). Media Konvensional Dan Media Digital Dalam Pembelajaran. *JUTECH : Journal Education and Technology*, *4*(2), 84–95. https://doi.org/10.31932/jutech.v4i2.2920

Zaidah, A., Hidayatulloh, A., Mahariyanti, E., Irwansah, I., Prayunisa, F., Azizi, A., Rasyidi, M., Muttaqin, M. Z. H., & Muhsinun, M. (2023). Pentingnya Pendidikan dalam Rangka Membangun Motivasi Pelajar Untuk Melanjutkan ke Jenjang Perguruan Tinggi. *DEVOTE: Jurnal Pengabdian Masyarakat Global*, *2*(2), 163–166. https://doi.org/10.55681/devote.v2i2.1996

How to cite this article:

Fitriyani., Handayani, L., Subali, B., & Widiarti, N. (2026). Trends in The Development of Articulate Storyline Media in Science Learning in Elementary Schools (2020-2025). *Journal of Educational Sciences*, *10(3)*, 23-39.