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# Systematic Literature Review: Utilization of Articulate Storyline-based Interactive Learning Media in Primary School Student Learning

## Winda Kurniasari<sup>1\*</sup>; Yeri Sutopo<sup>2</sup>; Harianingsih<sup>3</sup>; Bambang Subali<sup>4</sup>; Nuni Widiarti<sup>5</sup>

<sup>1</sup>Elementary Education, Universitas Negeri Semarang, Indonesia <sup>2</sup>Vocational Education, Universitas Negeri Semarang, Indonesia <sup>3</sup>Chemical Engineering, Universitas Negeri Semarang, Indonesia <sup>4</sup>Physics Education, Universitas Negeri Semarang, Indonesia <sup>5</sup>Chemistry Education, Universitas Negeri Semarang, Indonesia

<sup>1\*</sup>Corresponding Email: <u>windakurnia35@gmail.com</u>, Phone Number: 0857 xxxx xxxx

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Abstract: This study aims to examine the utilization of Articulate Storylinebased interactive learning media in the context of learning in elementary schools through a Systematic Literature Review (SLR) approach. A total of 25 articles from national and international journals published between 2021 and 2025 were analyzed to identify the contribution of this media to improving students' learning outcomes, motivation, understanding, science literacy, and critical thinking skills. The results showed that Articulate Storyline can present learning materials interactively and engagingly through visual, audio, simulation, and self-evaluation features, thus creating an adaptive and meaningful learning experience. This media is proven effective in various subjects such as science, social studies, mathematics, Indonesian language, and Pancasila education for elementary school students. Despite its many benefits, implementation challenges such as infrastructure limitations and differences in student learning styles are still a concern. Therefore, further research is needed to explore solutions and expand the application of this media in various educational contexts. This study provides important recommendations for teachers and education practitioners in developing innovative digital learning media according to the needs and characteristics of learners in the digital era.

Abstrak: Tujuan penelitian ini untuk mengkaji pemanfaatan media pembelajaran interaktif berbasis Articulate Storyline dalam konteks pembelajaran di sekolah dasar melalui pendekatan Systematic Literature Review (SLR). Sebanyak 25 artikel dari jurnal nasional dan internasional yang diterbitkan antara tahun 2021 hingga 2025 dianalisis untuk mengidentifikasi kontribusi media ini terhadap peningkatan hasil belajar, motivasi, pemahaman, literasi sains, dan kemampuan berpikir kritis siswa. Hasil kajian menunjukkan bahwa Articulate Storyline mampu menyajikan materi pembelajaran secara interaktif dan menarik melalui fitur visual, audio, simulasi, dan evaluasi mandiri, sehingga menciptakan pengalaman belajar yang adaptif dan bermakna. Media ini terbukti efektif diterapkan di berbagai mata pelajaran seperti IPA, IPS, Matematika, Bahasa Indonesia, dan Pendidikan Pancasila bagi siswa sekolah dasar. Meskipun memiliki banyak manfaat, tantangan implementasi seperti keterbatasan infrastruktur dan perbedaan gaya belajar siswa masih menjadi perhatian. Oleh karena itu, dibutuhkan penelitian lanjutan guna mengeksplorasi solusi dan memperluas penerapan media ini dalam berbagai konteks pendidikan. Kajian ini memberikan rekomendasi penting bagi guru dan praktisi pendidikan dalam mengembangkan media pembelajaran digital yang inovatif, sesuai dengan kebutuhan dan karakteristik peserta didik di era digital.

#### A. Introduction

In this era of globalization, information and communication technology development is taking place quickly. s development encourages us to continue to hone our skills and improve our competencies in order to adapt and remain relevant amid the changing times that are increasingly modern. Along with advances in science and technology, the world of education is also experiencing rapid development, and many aspects of the teaching and learning process have undergone significant changes (Mulyani & Haliza, 2021). Education is not just a learning activity but also includes structured interactions in the learning process. In this process, teachers convey knowledge to students, and for the material to be well received, it is necessary to apply the correct method according to the needs of students (Wirabumi, 2020). Educators need to be creative and utilize innovative and fun learning media in teaching and learning activities to make the learning process more interesting (Wulandari & Nisrina, 2020).

The development of modern technology encourages educators to continue to create innovations in learning methods. One of the things that teachers pay most attention to is how to create a quality classroom atmosphere. To realize this, various efforts continue to make teaching and learning more effective. One is to improve the ability to utilize learning media (Saleh et al., 2023). Learning media includes all forms of aids, be it in print, visual, audio, or a combination of both, including technological devices used during the learning process. The presence of this media aims to help students to be more involved and active, both when learning in the classroom and outside the classroom (Safira et al., 2021). Learning media is important in changing abstract concepts to be more real and easily understood by students. As one of the main components in the educational process, this media is used by teachers as a means of helping to convey subject matter so that students can understand the learning content more effectively (Daniyati et al., 2023).

Learning media has also progressed along with the times, which is marked by the presence of interactive learning media (Heryani et al., 2022). Interactive learning media has many benefits, such as improving the quality of student learning, attracting attention through visual, audio, and kinesthetic displays, and encouraging active engagement. Its interactivity allows students to learn independently at their own pace and helps teachers deliver complex material more simply. This creates a more effective, enjoyable, and meaningful learning process (Tabina et al., 2024). According to Gulo & Harefa (2022), interactive learning media can help students understand the subject more easily by providing a direct learning experience. This media also serves as a bridge for teachers in delivering material so that the learning process becomes more interesting and enjoyable for students.

The use of interactive learning media is one of the important efforts to increase learning effectiveness and students' absorption of the material. However, many teachers still have not utilized digital media in teaching and learning. Research conducted by Husain & Ibrahim (2021) shows that teachers still rely on conventional media, such as textbooks and sticky pictures, without utilizing multimedia-based media such as PowerPoint or other

visual aids. This condition is undoubtedly challenging in creating interactive, fun learning through technological developments. This lack of innovation in using learning media can make student learning outcomes less than optimal and affect their learning motivation. As a result, students tend to feel bored, especially when the material taught is abstract and less interesting. Other research conducted by Sari & Harjono (2021) shows that the learning outcomes of grade IV IPAS students on the material of economic activities are still not optimal, as indicated by the large number of student scores that have not reached the KKM. Even though the teacher has used learning media besides textbooks, the media cannot attract students' interest. This disinterest makes students tend not to focus and choose to chat with friends, which ultimately impacts their low understanding of the material. In addition, textbooks full of writing are less attractive to students. Therefore, innovation is needed in selecting and using more interesting learning media to make learning more effective and enjoyable for students. According to Rahman and Latif (2020), many teachers in the field still cannot develop teaching materials independently. The material or information presented in teacher and student books is still limited and does not fully cover learning needs.

Based on this, teachers must continue to innovate in designing and utilizing learning media that can support the development of student's skills, especially those that are by the demands of today. Of course, using interactive learning media must still pay attention to the characteristics of students and subject matter. One learning medium that has proven effective is interactive learning media such as Articulate Storyline. It combines dynamic visual elements, interactive simulations, and evaluation quizzes, making it easier for teachers to deliver more complicated material. With scenario creation, video animation, and automatic feedback, Articulate Storyline helps teachers teach material more engagingly and encourages students to learn independently. In addition, it also acts as a bridge between abstract concepts and visualizations that are easier to understand while increasing student engagement, motivating them to be more enthusiastic about learning, and strengthening their confidence through supportive learning experiences (Nurhidayah et al., 2025). Articulate Storyline is one of the interactive digital media that allows educators to design learning materials according to student needs. Through this software, teachers can create and present learning content that is interactive, interesting, and easily accessible to students, both through smartphones and laptop devices, thus supporting a more flexible and enjoyable learning process (Ningsih et al., 2023).

Developing interactive multimedia based on Articulate Storyline can be an effective tool for teachers in delivering materials, media, and learning content based on student interests. This media is very appropriate to use in the learning process because the way to use it is pretty simple and does not require complicated steps. In addition, Articulate Storyline allows students to access materials easily through shareable links. With the convenience and interactivity offered, this application is expected to improve student learning outcomes (Sinta et al., 2021). One of the advantages of Articulate Storyline is its ease of use, as it does not require programming language skills or scripts to operate.

However, this application has limitations, namely that it is not compatible with iOS and macOS operating systems, so it can only be accessed through Android and Windows-based devices (Mufidah & Khori, 2021).

Seeing the problems previously described, using interactive multimedia based on Articulate Storyline can be an innovative solution to overcome students' difficulties in understanding the material in learning. This media is designed independently by presenting a combination of text, images, videos, and interactive questions that teachers have never used in previous learning activities. In addition, students can access this media anytime and anywhere, as long as they have an access link, making it interesting to be the object of research. Several research studies have revealed that using more articulate Storyline learning media successfully improved student learning outcomes (Jais & Amri, 2021). In addition, research by Firdawela & Reinita (2021) showed that the Articulate Storyline learning media results were declared valid and practical; the validation results showed a very valid category with excellent teacher and student responses. Research conducted by Budiana et al (2024) also shows that Articulate Storyline is an interactive media suitable for learning.

Although many studies have examined the effectiveness of interactive learning media in improving student learning outcomes, these studies are generally conducted through an experimental or developmental approach (research and development) on one media in a particular context. Previous studies have proven that an Articulate Storyline is a valid and practical media for learning. However, these studies tend to be partial, limited to the scope of specific subjects or levels, and have not provided a comprehensive picture of the trends, quality, and direction of this media's development, especially in elementary school learning.

The gap filled by this research is that no systematic study comprehensively examines the utilization of Articulate Storyline as an interactive learning media for elementary school students through the Systematic Literature Review (SLR) method. The SLR approach is critical to summarize previous findings, identify research gaps, and provide directions for further research in an evidence-based manner. The novelty contribution of this research lies in its approach that uses the Systematic Literature Review method to analyze and map research results over the past five years (2021-2025) related to the use of Articulate Storylines in primary school student learning.

This study will review and analyze previous research results using interactive learning media based on Articulate Storylines in elementary school learning. This literature study is expected to obtain an overview of the utilization of Articulate Storyline in improving students' understanding, motivation, and involvement during the learning process. The benefit of this research is to provide recommendations for teachers and education practitioners in developing innovative digital learning media and adjusting student characteristics.

#### B. Method

This research applies the Systematic Literature Review (SLR) method to collect and analyze various studies related to interactive learning media based on Articulate Storylines in students' learning process at the elementary school level. Systematic Literature Review is a form of literature review carried out structured and directedly, aiming to collect secondary data from various relevant sources, such as scientific journals, research articles, and other academic works (Rachmadhani & Kamalia, 2023). The Systematic Literature Review method is a research approach in which researchers thoroughly review, evaluate, and interpret various studies on the study's main topic. Researchers identify, assess, and conduct an indepth review of all relevant literature to comprehensively understand the issues raised (Prasetya et al., 2025).

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The review of journals In this study was carried out systematically by following predetermined stages. The stages of research conducted by Suretdawati (2022) include three stages: planning, conducting, and reporting. The planning stage in this study began with the preparation of the Systematic Literature Review protocol, in which the researcher determined the focus of the study on the use of interactive learning media based on Articulate Storyline in elementary school student learning. Furthermore, the criteria for searching articles sourced from Google Scholar and considering other platforms such as GARUDA and SINTA to get more complete results with a publication period between 2021 and 2025, using the keywords "interactive learning media, articulate storyline, and elementary school." The next stage is conducting, which is searching and selecting articles based on predetermined criteria. This process was carried out with the help of the Publish or Perish application. The article search process is limited to 200 articles in Indonesian and English published in the last five years, namely 2021-2025. The search results obtained 42 articles indexed by Google Scholar. Some articles were eliminated on the grounds of lack of relevance and found not to be included in the criteria because the article was part of a thesis/thesis and was considered less efficient to analyze. Then, 25 articles were selected that were most relevant to the topic to be analyzed. The last stage is reporting, which is preparing the study's results in structured writing according to a predetermined format, including presenting results, analysis, and conclusions from the entire literature review process.

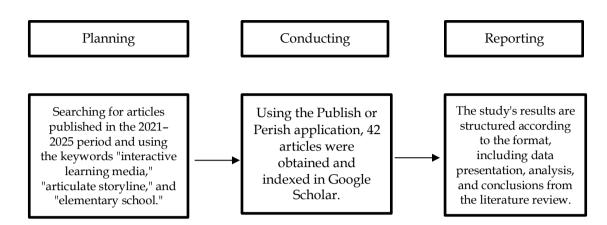


Figure 1. Research Flow

# C. Result and Discussion Result Data Analysis

Data analysis is carried out systematically using the PRISMA approach. The results of searching for articles that discuss interactive learning media based on articulate storylines in elementary schools from 2021 to 2025 show 42 articles in the Publish or Perish application. However, after analysis, only 25 suitable articles were found. Previous studies published in national and international journals form the basis of this article. Previous research was analyzed to gain insight into the issues discussed. The results are then classified based on existing findings.

Based on the article data obtained, Figure 2 shows the research publications on articulate storyline-based interactive learning media in elementary schools from 2021 to 2025.

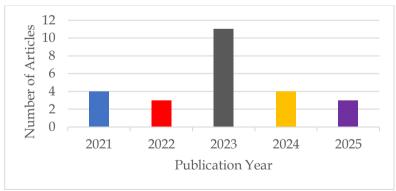


Figure 2. Research Publication Chart

Figure 2 shows that in 2023, the number of studies related to Articulate Storyline learning media at the elementary school level spiked compared to other years. This shows that in that year, researchers' attention to developing interactive learning media increased, and the need for more interesting and effective digital learning. This increase may also

reflect the widespread use of technology in primary education and the drive to create learning that suits the characteristics of 21st-century students.

#### **Literature Review Results**

The results of the literature review of 25 articles show that using interactive learning media based on Articulate Storyline positively impacts elementary school students' learning. Of the 25 articles, 15 were published in international journals, and 10 were published in national journals. Eight articles with the highest citations are included in Table 1.

Table 1. Highest Total Citation Articles

| No. | Heading   | Author                             | <b>Total Citations</b> |
|-----|---|------------------------------------|------------------------|
| 1   | "Pengembangan Media Pembelajaran Interaktif Berbasis<br>Web Articulate Storyline Pada Pembelajaran IPA di Kelas<br>V Sekolah Dasar"                                     | Safira et<br>al (2021)             | 128                    |
| 2   | "Pengembangan Media Pembelajaran Interaktif Articulate<br>Storyline Berbasis Keterampilan Berpikir Kritis Pada<br>Pembelajaran IPA Bagi Siswa Sekolah Dasar"            | Legina &<br>Sari<br>(2022)         | 55                     |
| 3   | "Interactive Multimedia Based On Articulate Storylines In<br>The Topic Of Plant Anatomy And Physiology"   | Septiana<br>et al<br>(2022)        | 30                     |
| 4   | "Pengembangan Multimedia Interaktif Berbantu<br>Articulate Storyline Untuk Meningkatkan Hasil Belajar<br>Kognitif Siswa Pada Pelajaran IPS Di Kelas V Sekolah<br>Dasar" | Agustina<br>et al<br>(2021)        | 17                     |
| 5   | "Pengembangan Media Interaktif Menggunakan Aplikasi<br>Articulate Storyline Sebagai Media Pembelajaran IPA Di<br>Sekolah Dasar"   | Hidayah<br>et al<br>(2023)         | 16                     |
| 6   | "Project-Based Learning Interactive Multimedia With<br>Orientation Of Environmental Problems Assisted By<br>Articulate Storyline 3 For Grade V Elementary Schools"      | Pratiwi et al (2023)               | 15                     |
| 7   | "Development Of Android-Based Interactive Media<br>Articulate Storyline 3 In The Merdeka Curriculum"  | Ananda<br>et al<br>(2023)          | 15                     |
| 8   | "Pengembangan Multimedia Interaktif Berbasis Articulate<br>Storyline Pada Pembelajaran Tematik Abad 21 Bagi Siswa<br>Sekolah Dasar"                                     | Halimah<br>&<br>Indriani<br>(2021) | 12                     |

This study analyzed 25 articles, of which 8 had the highest number of citations. Meanwhile, the other 17 articles were categorized by year of publication. The classification by publication year of the 17 articles is presented in the following table.

**Table 2.** Articles in 2021

| No. | Heading   | Author | Research Results  |
|-----|---|--------|---|
| 1   | "Multimedia Interactive<br>Learning in Science Subjects<br>for Grade Fourth<br>Elementary School<br>Students" | 2      | Interactive learning multimedia based on the DDD-E model was declared very feasible for use in science learning in grade VI elementary school, with validation results from experts and student trials showing high scores in the good to excellent category. |

Of all the articles analyzed, only one was published in 2021, which was then included in this study to represent publications in that year.

Table 3. Articles in 2022

| No. | Heading                    | Author               | Research Results                       |
|-----|----------------------------|----------------------|--|
| 1   | "Interactive Media         | Adhiana et al (2022) | Articulate Storyline learning media in |
|     | Development Using          |                      | the form of practical and valid        |
|     | Articulate Storyline-Based |                      | instructional games to improve         |
|     | Instructional Games for    |                      | mathematics learning outcomes of grade |
|     | Teaching Fractions"        |                      | V elementary school students.          |

The analysis of all articles revealed that only one article was published in 2022, and this article was included in the review as a representation of the scientific work from that year.

Table 4. Articles in 2023

| No. | Heading                    | Author               | Research Results                          |
|-----|----------------------------|----------------------|---|
| 1   | "Pengembangan Media        | Maivi & Erita (2023) | Technology-based learning media is        |
|     | Pembelajaran IPAS          |                      | feasible, practical, and effective. It is |
|     | Menggunakan Articulate     |                      | highly valid and has a positive impact    |
|     | Storyline 3 Berbasis       |                      | on student learning engagement.           |
|     | Discovery Learning di      |                      |   |
|     | Kelas IV Sekolah Dasar"    |                      |   |
| 2   | "Media Pembelajaran        | Utari & Ramadan      | The Articulate Storyline 3 learning       |
|     | Interaktif Berbasis        | (2023)               | media for IPAS material was declared      |
|     | Articulate Storyline 3     |                      | very valid with a score of 95.2% and      |
|     | Untuk Siswa SD Kelas IV"   |                      | ready to use.                             |
| 3   | "Development Of            | Adam & Mulyani       | Articulate Storyline learning media       |
|     | Interactive Learning Media | (2023)               | was declared feasible and effective for   |
|     | Articulate Storyline Of    | ,                    | Indonesian elementary school              |
|     | Indonesian Language        |                      | learning, with 89% media eligibility,     |
|     | Learning In Fourth Grade   |                      | 92% material, and significantly           |
|     | Elementary School"         |                      | improved learning outcomes.               |
| 4   | "Development of Learning   | Iulia et al (2023)   | The Articulate Storyline learning         |
| _   | Media Using Articulate     | , = ()               | media effectively increases the           |
|     | Storylines to Increase     |                      | motivation to learn mathematics for       |



| No. | Heading   | Author                        | Research Results  |
|-----|---|-------------------------------|---|
|     | Student Motivation in<br>Mathematics Subjects in<br>Elementary Schools"   |                               | grade V elementary school students, with a validity of 91% and student motivation reaching 91.33%.  |
| 5   | "The Effectiveness of<br>Articulate Storyline 3<br>Application-Based<br>Interactive Learning Media<br>in Social Studies Learning<br>for Elementary School"      | Nursalam et al<br>(2023)      | The Articulate Storyline 3 learning media effectively improves social studies students' map reading skills and learning outcomes in grade IV at SD Makassar with active student and teacher activities.   |
| 6   | "Interactive Media<br>Articulate Storyline to<br>Improving Students'<br>Learning Outcomes on<br>Traditional Engklek Games<br>Material"                          | Milenia & Nurharini<br>(2023) | The Articulate Storyline learning media is proven effective and suitable for enhancing the learning outcomes of fourth-grade students on the topic of Movement in the Traditional Engklek Game. This is demonstrated by a significant improvement in pretest and posttest scores and strong validation. |
| 7   | "Articulate Storyline-Based<br>Learning Media Loaded<br>with Local Wisdom Values<br>in Historical Narrative Text<br>Material for Elementary<br>School Students" | Jenahut & Lake<br>(2023)      | The Articulate Storyline learning media based on local wisdom on historical narrative text material is suitable for grade V of elementary school, with an assessment of 88.08% from experts and practitioners and a positive response of 95.47% from students and teachers.                             |
| 8   | "Articulate Storyline 3<br>Interactive Media to<br>Increase Learning Interest<br>and Activeness of Fifth<br>Grade Elementary School<br>Students"                | Majid & Kawuryana (2023)      | The interactive media Articulate Storyline 3 is highly suitable and adequate for fifth-grade elementary school, as demonstrated by expert validation and experimental results showing significant differences between the experimental and control classes.   |

Based on the analysis of all articles, eight articles were published in 2023, which were used as a sample to represent the scientific work from that year in this study.

Table 5. Articles in 2024

| No. | Heading  | Author                 | Research Results  |
|-----|--|------------------------|---|
| 1   | Pembelajaran Interaktif Berbasis<br>Articulate Storylinepada Mata<br>Pelajaran Pendidikan Pancasila<br>di Kelas II SD Panca Budi T.A | Zahara et al<br>(2024) | Articulate Storyline media on unity and unity materials in grade II elementary school has proven feasible, practical, and effective, significantly increasing students' understanding from pretest to |
|     | 2023/2024"   |                        | posttest.   |



| No. | Heading   | Author                         | Research Results   |
|-----|---|--------------------------------|--|
| 2   | "Development of Interactive<br>Learning Media Based on<br>Articulate Storyline to Improve<br>Student' Science Literacy"                             | Ramadhani<br>& Asrul<br>(2024) | Articulate Storyline media on Earth, Sun, and Moon improves the scientific literacy of elementary school students, with a validity of 86% and a moderate effectiveness (0.69).   |
| 4   | "Interactive Learning Media<br>Based on Articulate Storyline in<br>Social Sciences Learning for<br>Grade V Elementary School"                       | Kusuma &<br>Ahmadi<br>(2024)   | Articulate Storyline media containing local wisdom in historical narrative texts is very suitable for use in grade V of elementary school, with an assessment of 88.08% from experts and 95.47% positive responses from students and teachers. |
| 5   | "Interactive Learning<br>Multimedia Articulate Storyline<br>as an Alternative Media to<br>Improve Elementary Students'<br>Critical Thinking Skills" | Moriska &<br>Hanif (2024)      | Multimedia Articulate Storyline has significantly improved grade VI students' analytical and critical thinking skills in mathematics learning.   |

The analysis of all articles showed that five articles were published in 2024, which were then used as a sample to represent scientific papers from that year in this study.

**Table 6.** Articles in 2025

| No. | Heading   | Author                            | Research Results  |
|-----|---|-----------------------------------|---|
| 1   | "Pengembangan Media<br>Pembelajaran Interaktif<br>Berbasis Articulate<br>Storyline Pada Materi<br>Bangun Datar"                           | Pratama et al (2025)              | This learning medium is perfect<br>for grade 2 elementary<br>mathematics, and it has received<br>high validation and response from<br>experts, teachers, and students.              |
| 2   | "Pengembangan Media Pembelajaran Interaktif Berbantuan Articulate Storyline 3 Pada Pembelajaran Pendidikan Pancasila Siswa Sekolah Dasar" | Dewi et al (2025)                 | Articulate Storyline 3 media has proven feasible, effective, and practical for use in elementary schools. It can increase the motivation and learning outcomes of grade V students. |
| 3   | "Development of<br>Interactive Multimedia<br>Based on Articulate<br>Storyline for Force Material<br>to Improve Learning<br>Outcomes"      | Nurkhalimah &<br>Andriani ( 2025) | Articulate Storyline-based interactive multimedia for style materials was declared feasible and practical, with high validity and positive responses from teachers and students.    |

After analyzing all articles, it was found that three articles were published in 2025. These three articles were selected as examples to illustrate the scientific works representing that year in this study.

Based on the articles reviewed, the application of interactive learning media based on Articulate Storyline has been carried out at various grade levels in elementary schools, with a fairly varied distribution. It was noted that grade II was the object of research in 2 studies, indicating that although students at the early level have begun to be introduced to digital media, the application is still relatively limited. Meanwhile, grade IV is one of the most researched levels, with nine studies, followed by grade V, with the highest number, 11 studies. This shows that Articulate Storyline media is considered the most relevant and practical for middle-grade students with basic digital literacy skills. As for grade VI, it only appeared in 3 studies, possibly due to the focus of learning more directed toward final exam preparation. This finding reflects that grade level influences the tendency to use and develop Articulate Storyline-based interactive media in the context of basic education.

The analysis of the 25 articles reviewed found that Articulate Storyline-based interactive learning media has been applied in various subjects at the elementary school level. Natural science subjects are the most dominant, appearing in 10 articles, indicating that science materials that are abstract and require visualization are very suitable for being delivered through interactive media. Furthermore, Social Sciences (IPS) was found in 7 articles, indicating that this media is also effectively used to deliver concept and event-based materials. Mathematics, which requires procedural and logical understanding, appeared in 3 articles. In comparison, Pancasila Education was found in 2 articles, indicating the start of innovation in delivering character values more interestingly. Indonesian Language, Art, and thematic learning were only found in 1 article each, indicating that utilizing Articulate Storylines in these subjects is minimal and an opportunity for further research and development. This finding shows that although this media has been used in various learning contexts, its potential application is still comprehensive and has not been fully explored equally in all subjects.

Based on the analysis of 25 articles, using Articulate Storyline-based interactive learning media in primary schools generally focuses on developing students' cognitive abilities. The analysis results show that the most significant effect of using this media is the improvement of student learning outcomes, which is the leading indicator of learning success. In addition, this media is also proven to significantly increase students' interest and motivation to learn. Other positive effects can be seen in improving concept understanding, science literacy, and critical thinking skills. The various aspects of cognitive abilities developed through this media are represented visually in the pie chart in Figure 3.

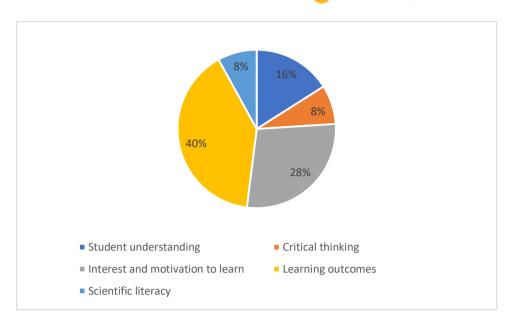


Figure 3. Learners' Ability in the Cognitive Domain

#### Discussion

A search of research articles on Articulate Storyline-based interactive learning media at the elementary level from 2021 to 2025 found 25 articles published in Google Scholar-indexed journals. As shown in Figure 1, research in this field experiences an up-and-down development every year. Especially in 2023, the number of publications on Articulate Storyline-based interactive learning media in elementary schools has increased significantly, and many were found through searches using Publish or Perish software.

As many as 25 articles were analyzed, eight with high citations. Based on the data in Table 1, it can be seen that the research conducted by Safira et al (2021) is the article with the highest number of citations. The research shows that interactive learning media based on Articulate Storyline is feasible for learning science in grade V elementary school and effectively increases student understanding. This research used the development method. Another article with a high number of citations, namely the work of Legina & Sari (2022), also applies the same research method, namely the development method.

Research on Articulate Storyline-based interactive learning media at the primary school level from 2021 to 2025 generally applies to grade IV and V students, as shown in Figure 2. Most of the research focuses on science, social studies, and mathematics subjects, as shown in Figure 3. Most of the research conducted uses development research methods. For example, Pratiwi et al (2023) designed interactive multimedia based on the Project Based Learning (PjBL) model using Articulate Storyline 3 for Ecosystem materials in grade V of elementary school. The study's results stated that this media is feasible, easy to use, and effective in improving student learning achievement. Meanwhile, research by Nursalam et al (2023) also used a development approach to apply Articulate Storyline 3 interactive media to improve general map reading skills and student learning outcomes in social studies subjects in elementary schools in the Makassar City area.

An analysis of 25 studies on the use of Articulate Storyline-based interactive learning media in various educational contexts reveals several key patterns and benefits, where it acts as an innovative link between digital technology and the learning process, making it more appropriate and relevant to learners' needs. The use of this interactive learning media has proven to have a positive impact, with research findings showing a significant effect on improving the cognitive aspects of primary school students. The cognitive aspects include learning outcomes, interest and motivation to learn, material understanding, science literacy, and critical thinking skills. The distribution of students' cognitive abilities is shown in a pie chart, which can be seen in Figure 3.

The first is a positive impact on learning achievement. Articulate Storyline-based learning media is proven effective in improving student learning outcomes because it can present material interactively, interestingly, and easily understood. Like the research of Agustina et al (2021), the results showed that interactive multimedia assisted by Articulate Storyline in grade V social studies learning with material on efforts to maintain Indonesian Sovereignty was declared very feasible, practical, and effective to use to improve students' cognitive learning outcomes. Other research by Adam & Mulyani (2023), Adhiana et al (2022), Milenia & Nurharini (2023), Kusuma & Ahmadi (2024), Majid & Kawuryana (2023), Nurkhalimah & Andriani (2025), also proved that with features such as animation, interactive quizzes, audio-visuals, and intuitive navigation, this media not only clarifies complex concepts, but also encourages active student involvement in the learning process. In addition, the adaptive and flexible presentation allows students to learn according to their own pace and learning style, thus having a positive impact on improving student learning outcomes. The study conducted by Ananda et al (2023) revealed that the use of Articulate Storyline-based learning media is effective in the context of the Merdeka Curriculum because, in addition to being able to improve the achievement of learning outcomes, it also encourages increased student involvement and activity during the learning process.

The second increased student interest and motivation. Articulate Storyline-based learning media is proven to be effective in increasing students' interest and motivation to learn because it can present a more interesting, interactive, and fun learning experience, as evidenced by the results of research from Julia et al (2023) and Dewi et al (2025) showed that the learning media can foster student interest in learning, assist teachers in integrating technology into the learning process, and encourage student motivation to be active in learning activities.

The third is to deepen students' understanding of the material. Interactive learning media based on Articulate Storylines has proven effective in improving student understanding. Namely, with the support of interactive elements such as simulations, animations, and practice questions, students can learn through direct experience that reinforces the concepts taught. This interactivity allows students to actively participate in the learning process, explore the material independently, and receive real-time feedback to better understand the lesson's content and remember the information (Zahara et al., 2024). In addition, it allows students to learn at their own pace, repeat material that has not been

understood, and get instant feedback, all of which contribute to a deeper understanding and longer retention duration of the information learned (Utari & Ramadan, 2023).

The fourth is that it can Strengthen Science Literacy Skills. Articulate Storyline-based interactive learning media can improve students' science literacy by presenting scientific concepts visually and dynamically, facilitating the understanding and application of science knowledge. Through animations, simulations, and interactive graphics, students can see the application of scientific theory in a real context and explore science phenomena independently, which enriches the learning experience and deepens understanding of science concepts (Ramadhani & Asrul, 2024). This activity-based learning also provides opportunities for students to discuss, work together in groups, and find solutions to scientific problems, thereby improving their ability to communicate and collaborate in the context of science. This improves students' science literacy (Nursalam et al., 2023).

The fifth is that it can support the development of advanced critical and analytical thinking skills. Research by Legina & Sari (2022) shows that Articulate Storyline-based interactive learning media effectively improves students' critical thinking skills. However, this article does not discuss implementation challenges such as limited internet access or adaptation to various learning styles. With strong validation results, this medium has the potential to be applied in primary schools, but more research is needed to address implementation challenges in a variety of contexts. Research by Moriska & Hanif (2024) shows that Articulate Storyline-based interactive learning media effectively improves students' critical thinking skills, creativity, motivation, and engagement. However, this study is limited to one school, so the results may not be generalizable, and further research involving more schools and exploring implementation challenges in different educational contexts is needed.

# D. Conclusion

Based on the results of an analysis of 25 articles published between 2021 and 2025, Articulate Storyline-based interactive learning media has great potential to support the improvement of learning outcomes and the development of cognitive abilities of elementary school students. This media is proven to be effective in various subjects and is most widely applied to students in grades IV and V. In addition to helping improve learning outcomes, this media can also encourage students' interest, motivation, material understanding, and critical thinking skills through interactive features that are interesting and easy to use.

This finding has positive implications for the world of basic education, especially in encouraging learning innovations that are more adaptive and fun. Articulate Storyline allows learning that is tailored to the speed and learning style of students, thus increasing the effectiveness of the teaching and learning process. Implementing this media can also be a solution to overcoming the challenges of conventional learning that is less interesting and less facilitating active student participation. Therefore, teachers and media developers are encouraged to explore and integrate this technology into daily learning activities.

Despite the advantages, challenges still need to be considered, such as limited access to technology, teacher readiness, and differences in context between schools. Future research is recommended to further explore the implementation strategy of this media in various school conditions, including in areas with limited infrastructure. In addition, developing more diverse and contextualized Articulate Storyline content according to curriculum needs and student characteristics must also be studied so that this media can be applied more widely and effectively at various levels and environments of basic education.

#### References

- Adam, N. F., & Mulyani, P. K. (2023). Development of Interactive Learning Media Articulate Storyline of Indonesian Language Learning in Fourth Grade Elementary School. *Journal of Education, Teaching, and Learning, 8*(2), 274–281.
- Adhiana, V. I., Yuniawatika, Y., Ahdhianto, E., & Wantoro, J. (2022). Interactive Media Development Using Articulate Storyline-Based Instructional Games for Teaching Fractions. *Profesi Pendidikan Dasar*, 9(1), 15–27. https://doi.org/10.23917/ppd.v9i1.16927
- Agustina, H., Roesminingsih, M. V., & Jacky, M. (2021). Pengembangan Multimedia Interaktif Berbantu Articulate Storyline Untuk Meningkatkan Hasil Belajar Kognitif Siswa pada Pelajaran IPS Di Kelas V. *Jurnal Education and Development*, 9(2), 567–571.
- Ananda, R., Hadiyanto, H., Erita, Y., & Karneli, Y. (2023). Development of Android-Based Interactive Media Articulate Storyline 3 in the Merdeka Curriculum. *Jurnal Penelitian Pendidikan IPA*, 9(9), 6819–6827. <a href="https://doi.org/10.29303/jppipa.v9i9.5393">https://doi.org/10.29303/jppipa.v9i9.5393</a>
- Budiana, S., Rostikawati, T., Karmila, N., Rahmah, M., & Putri, L. (2024). Implementation of Digital Interactive Multimedia Development Based on an Articulate Storyline. *Jurnal Pendidikan & Pengajaran Guru Sekolah Dasar*, 07(01), 234–239.
- Daniyati, A., Saputri, I. B., Wijaya, R., Septiyani, S. A., & Setiawan, U. (2023). Konsep Dasar Media Pembelajaran. *Journal of Student Research*, 1(1), 282–294. <a href="https://doi.org/10.55606/jsr.v1i1.993">https://doi.org/10.55606/jsr.v1i1.993</a>
- Dewi, L. C., Yudaparmita, G. N. A., & Ardiawan, I. K. N. (2025). Pengembangan Media Pembelajaran Interaktif Berbantuan Articulate Storyline 3 pada Pembelajaran Pendidikan Pancasila Siswa Sekolah Dasar. *Jurnal Penjaminan Mutu Volume*, 11(01), 76–86. https://doi.org/10.25078/jpm.v11i01.3903
- Firdawela, I., & Reinita, R. (2021). Pengembangan Media Pembelajaran Articulate Storyline Menggunakan Model Think Pair Share di Kelas IV Sekolah Dasar. *Jurnal PGSD: Jurnal Ilmiah Pendidikan Guru Sekolah Dasar*, 14(2), 99–112. https://doi.org/10.33369/pgsd.14.2.99-112
- Gulo, S., & Harefa, A. O. (2022). Pengembangan Media Pembelajaran Interaktif Berbasis Powerpoint. *Educativo: Jurnal Pendidikan, 1(*1), 291–299. <a href="https://doi.org/10.56248/educativo.v1i1.40">https://doi.org/10.56248/educativo.v1i1.40</a>

- Halimah, I. N., & Indriani, F. (2021). Pengembangan Multimedia Interaktif Berbasis Articulate Storyline pada Pembelajaran Tematik Abad 21 bagi Siswa Sekolah Dasar. *Sekolah Dasar: Kajian Teori Dan Praktik Pendidikan, 30*(2), 159-170. <a href="https://doi.org/10.17977/um009v30i22021p159">https://doi.org/10.17977/um009v30i22021p159</a>
- Heryani, A., Pebriyanti, N., Rustini, T., & Wahyuningsih, Y. (2022). Peran Media Pembelajaran Berbasis Teknologi dalam Meningkatkan Literasi Digital pada Pembelajaran IPS di SD Kelas Tinggi. *Jurnal Pendidikan*, 31(1), 17-28. <a href="https://doi.org/10.32585/jp.v31i1.1977">https://doi.org/10.32585/jp.v31i1.1977</a>
- Hidayah, N., Nafitri, S. E., Zaky, F., & MZ, A. F. S. A. (2023). Pengembangan Media Interaktif Menggunakan Aplikasi Articulate Storyline sebagai Media Pembelajaran IPA di Sekolah Dasar. *PENDAGOGIA: Jurnal Pendidikan Dasar*, 3(2), 83–91.
- Husain, R., & Ibrahim, D. (2021). Pengembangan Media Pembelajaran Interaktif Menggunakan Articulate Storyline di Sekolah Dasar. *Aksara: Jurnal Ilmu Pendidikan Nonformal*, 7(3), 1365-1374. <a href="https://doi.org/10.37905/aksara.7.3.1365-1374.2021">https://doi.org/10.37905/aksara.7.3.1365-1374.2021</a>
- Islamyati, M. P., & Manuaba, I. B. S. (2021). Multimedia Interactive Learning in Science Subjects for Grade Fourth Elementary School Students. *Indonesian Journal of Educational Research and Review,* 4(2), 201-212. <a href="https://doi.org/10.23887/ijerr.v4i2.39664">https://doi.org/10.23887/ijerr.v4i2.39664</a>
- Jais, M., & Amri, U. (2021). Pengaruh Penggunaan Media Pembelajaran Berbasis Articulate Storyline 3 terhadap Hasil Belajar Siswa Mata Pelajaran IPA di SDN 2 Gantarang Keke Kabupaten Bantaeng. *Jurnal Studi Guru dan Pembelajaran*, 4(3), 795–801. https://doi.org/10.30605/jsgp.4.3.2021.1531
- Jenahut, K. S., & Lake, A. C. O. R. (2023). Articulate Storyline-Based Learning Media Loaded with Local Wisdom Values in Historical Narrative Text Material for Elementary School Students. *Jurnal Ilmiah Sekolah Dasar*, 7(3), 566–578. <a href="https://doi.org/10.23887/jisd.v7i3.54079">https://doi.org/10.23887/jisd.v7i3.54079</a>
- Julia, R. I., Nellitawati, Bentri, A., & Desyandri. (2023). Development of Learning Media Using Articulate Storylines to Increase Student Motivation in Mathematics Subjects in Elementary Schools. *Jurnal Penelitian Pendidikan IPA*, 9(8), 6345–6352. <a href="https://doi.org/10.29303/jppipa.v9i8.4558">https://doi.org/10.29303/jppipa.v9i8.4558</a>
- Kusuma, D., & Ahmadi, F. (2024). Interactive Learning Media Based on Articulate Storyline in Social Sciences Learning for Grade V Elementary School. *MIMBAR PGSD Undiksha*, 12(1), 185–194. https://doi.org/10.23887/jjpgsd.v12i1.68763
- 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), 375–385.
- 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://doi.org/10.31004/innovative.v3i2
- Majid, A. F., & Kawuryana, S. P. (2023). Articulate Storyline 3 Interactive Media to Increase Learning Interest and Activeness of Fifth Grade Elementary School Students. *Jurnal Ilmiah Sekolah Dasar*, 7(4), 740–751. <a href="https://doi.org/10.23887/jisd.v7i4.61517">https://doi.org/10.23887/jisd.v7i4.61517</a>
- Milenia, R., & Nurharini, A. (2023). Interactive Media Articulate Storyline to Improving Students' Learning Outcomes on Traditional Engklek Games Material. *Journal of Education Technology*, 7(4), 707–714. https://doi.org/10.23887/jet.v7i4.69268
- Moriska, A., & Hanif, M. (2024). Interactive Learning Multimedia Articulate Storyline as an Alternative Media to Improve Elementary Students' Critical Thinking Skills. *Jurnal Ilmiah Sekolah Dasar*, 8(2), 258–269. https://doi.org/10.23887/jisd.v8i2.65310
- Mufidah, E., & Khori, N. (2021). Pengembangan Media Pembelajaran Articulate Storyline untuk Meningkatkan Hasil Belajar Siswa Sekolah Dasar di Masa Pandemi Covid 19. *IBTIDA'*, 2(2), 124–132. https://doi.org/10.37850/ibtida.v2i2.214
- Mulyani F, & Haliza N. (2021). Analisis Perkembangan Ilmu Pengetahuan dan Teknologi (IPTEK) dalam Pendidikan. *Jurnal Pendidikan Dan Konseling (JPDK)*, 3(1), 101–109.
- Ningsih, S., Susilo, T. A. B., & Dewi, A. S. (2023). Pengembangan Multimedia Interaktif Articulate Storyline pada Materi Tematik Kelas V Sekolah Dasar. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 8(2), 1823-1838.
- Nurhidayah, A., Mawarsari, V. D., & Suprapto, R. (2025). Systematic Literature Review: Penggunaan Media Articulate Storyline dalam Kemampuan Berpikir Geometri Siswa SMP. *Innovative: Journal of Social Science Research*, *5*(1), 6866-6885. https://doi.org/10.31004/innovative.v5i1.17881
- Nurkhalimah, A. I., & Andriani, A. E. (2025). Development of Interactive Multimedia Based on Articulate Storyline for Force Material to Improve Learning Outcomes. *Journal of Educational Sciences*, 9(2), 907–926.
- Nursalam, N., Muhajir, M., Wibowo, S. A., & Suardi, S. (2023). The Effectiveness of Articulate Storyline 3 Application-Based Interactive Learning Media in Social Studies Learning for Elementary School. AL-ISHLAH: Jurnal Pendidikan, 15(4), 5726-5732. <a href="https://doi.org/10.35445/alishlah.v15i4.3061">https://doi.org/10.35445/alishlah.v15i4.3061</a>
- Prasetya, B. D., Mustofa, M., Junaedi, I., & Kurniasih, A. W. (2025, March). Systematic Literature Review (SLR): Kemampuan Literasi Matematika dalam Model Problem Based Learning Bernuansa Etnomatematika ditinjau dari Self-Efficacy. In *PRISMA*, *Prosiding Seminar Nasional Matematika*, 230-241.
- Pratama, G. D., Raharjo, T. J., Handoyo, E., Subali, B., & Widiarti, N. (2025). Pengembangan Media Pembelajaran Interaktif Berbasis Articulate Storyline pada Materi Bangun Datar. *Pendas: Jurnal Ilmiah Pendidikan Dasar, 10*(1), 73–81. <a href="https://doi.org/10.23969/jp.v10i01.20275">https://doi.org/10.23969/jp.v10i01.20275</a>

- Pratiwi, K. I. A., Margunayasa, I. G., & Trisna, G. A. P. S. (2023). Project-Based Learning Interactive Multimedia with Orientation of Environmental Problems Assisted by Articulate Storyline 3 for Grade V Elementary Schools. *Journal of Education Technology*, 7(2), 332–342. https://doi.org/10.23887/jet.v7i2.59615
- Rachmadhani, S. A. D., & Kamalia, P. U. (2023). Analisis Strategi Pembelajaran Berdiferensiasi terhadap Hasil Belajar Peserta Didik: Systematic Literature Review. *Asatiza: Jurnal Pendidikan*, 4(3), 178-192. <a href="https://doi.org/10.46963/asatiza.v4i3.1231">https://doi.org/10.46963/asatiza.v4i3.1231</a>
- Rahman, M. H., & Latif, S. (2020). Pengembangan Bahan Ajar Tematik Terpadu Berbasis Problem Based Learning untuk Meningkatkan Kemampuan Berpikir Kritis Siswa SD Kelas V. *Edukasi*, 18(02), 246–258.
- Ramadhani, I. A., & Asrul, A. (2024). Development of Interactive Learning Media Based on Articulate Storylines to Improve Students' Science Literacy. *Lectura: Jurnal Pendidikan*, 15(2), 533–545. <a href="https://doi.org/10.31849/lectura.v15i2.20974">https://doi.org/10.31849/lectura.v15i2.20974</a>
- 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. <a href="https://doi.org/10.37478/jpm.v2i2.1109">https://doi.org/10.37478/jpm.v2i2.1109</a>
- Saleh, M. S., Syahruddin, Saleh, M. S., Azis, I., & Sahabuddin. (2023). *Media Pembelajaran*. Eureka Media Aksara.
- Sari, R. K., & Harjono, N. (2021). Pengembangan Media Pembelajaran Interaktif Berbasis Articulate Storyline Tematik terhadap Minat Belajar Siswa Kelas 4 SD. *Jurnal Pedagogi dan Pembelajaran*, 4(1), 122-130. https://doi.org/10.23887/jp2.v4i1.33356
- Septiana, I. G. Y., Wibawa, I. M. C., & Trisna, G. A. P. S. (2022). Interactive Multimedia Based on Articulate Storylines in the Topic of Plant Anatomy and Physiology. *International Journal of Elementary Education*, 6(2), 182–194. <a href="https://doi.org/10.23887/ijee.v6i2.46486">https://doi.org/10.23887/ijee.v6i2.46486</a>
- Sinta, N. A. K., Gede Astawan, I., & Made Suarjana, I. (2021). Belajar Subtema 3 Lingkungan dan Manfaatnya dengan Media Pembelajaran Interaktif Berbasis Articulate Storyline 3. *MIMBAR PGSD Undiksha*, 9(2), 211-219. <a href="https://doi.org/10.23887/jjpgsd.v9i2.35919">https://doi.org/10.23887/jjpgsd.v9i2.35919</a>
- Suretdawati, L. (2022). Systematic Literature Review: Upaya Meningkatkan Kemampuan Berpikir Kreatif pada Pembelajaran Matematika. *Jurnal Pendidikan Madrasah*, 7(2), 109-116. https://doi.org/10.14421/jpm.2022.72.02
- Tabina, M. H. C., Mubarok, A. I., Sari, I. M., Nabela, Y. A., Fakhriyah, F., & Fajrie, N. (2024). Analisis Media Pembelajaran Interaktif dalam Minat Belajar Siswa Kelas 5 SD 03 Tergo. *J-CEKI: Jurnal Cendekia Ilmiah*, *3*(5), 2493-2502. <a href="https://doi.org/10.56799/jceki.v3i5.4219">https://doi.org/https://doi.org/10.56799/jceki.v3i5.4219</a>

- Utari, D. R., & Ramadan, Z. H. (2023). Media Pembelajaran Interaktif Berbasis Articulate Storyline 3 untuk Siswa SD Kelas IV. *Jurnal Educatio*, 9(4), 1810–1817. https://doi.org/https://doi.org/10.31949/educatio.v9i4.6262
- Wirabumi, R. (2020). Metode Pembelajaran Ceramah. *Annual Conference on Islamic Education and Thought (ACIET)*, 1(1), 105-113.
- Wulandari, H., & Nisrina, D. A. Z. (2020). Hubungan Kreativitas dan Inovatif Guru dalam Mengajar di Kelas terhadap Peningkatan Motivasi dan Minat Belajar Peserta Didik. *Jurnal Ilmiah Wahana Pendidikan*, 9(16), 345–354. https://doi.org/10.5281/zenodo.8242365
- Zahara, J., Gandamana, A., Sitohang, R., Winara, W., & Aulia, S. M. (2024). Pengembangan Media Pembelajaran Interaktif Berbasis Articulate Storyline pada Mata Pelajaran Pendidikan Pancasila di Kelas II SD Panca Budi TA 2023/2024. *Innovative: Journal Of Social Science Research*, 4(5), 5394-5411. https://doi.org/10.31004/innovative.v4i5.15633