International Journal of Education and Learning Assessment
Vol. 01, No. 01, Tahun 2024, Hal. 42 - 54

The Effectiveness Of Use Of Powtoon-Based Audio Visual Learning Media On Science Learning Outcomes Of Primary School Students: A Systematic Literature Review

Reni Apriyani[1], Vivi Apriliatini[2], Dita[3]
[1,2 3]*Universitas Muhammadiyah Kotabumi*
Email: reniapryn29@gmail.com

Article Info

Article history:

Received February 10, 2024
Revised February 20, 2024
Accepted February 25, 2024

Keywords:

Audio Visual, Powtoon Based, Elementary School, Science Learning

ABSTRACT

The use of Powtoon-based audio-visual learning media has been proven to improve the quality of science learning in elementary schools, because it can be accessed by various types of learning needs, including students with disabilities. This research aims to systematically review the literature on the impact of implementing Powtoon-based audiovisual learning media on science learning outcomes in elementary school. This research uses the Systematic Literature Review (SLR) method. A literature search was carried out on the Google Scholar database with the keywords "powtoon-based audio-visual elementary school science learning". The literature analyzed is limited to the time period 2019-2023 using search keywords in 5 search stages. In the first stage, 80,500 documents were generated with the keyword "audio visual". Then the second stage produced 613 documents with the keyword "powtoon-based" and the insertion of the word "AND" in both keywords. After that, a third stage search was carried out using the keyword "primary school" and adding the word "AND" between the first and second keywords, resulting in 467 documents. The fourth stage carried out a search using the keyword "science learning" and also added the word "AND" to produce 206 documents. Then the fifth stage was carried out by selecting documents using several exclusion criteria so that 6 articles were obtained for review. Based on the results of this research, it is concluded that Powtoon-based audiovisual learning media can be an effective alternative for improving science learning outcomes in elementary schools.

Corresponding Author:

Author's name: Reni Apriyani
Author's agency : Universitas Muhammadiyah Kotabumi
Email: reniapryn29@gmail.com

Introduction

In this digital age, rapid technological developments are like big waves that change various aspects of life, including the world of education (Ramadhan et al., 2023). In this digital era, technological advances are like a powerful storm that brings change to various aspects of life, including the world of education (Liriwati, 2023). National Education System Law No. 20 of 2003 stipulates the importance of creating a conducive learning environment and a learning process that supports students to reach their maximum potential. This is in line with the aim of science education in elementary schools (SD), namely providing basic scientific knowledge and skills. Effective science learning does not only include delivering material, but also stimulates students' curiosity, critical thinking skills and intelligence in understanding natural phenomena and making the right decisions in everyday life (Efendi et al., 2013).

Science education in elementary schools presents an interesting adventurous experience, opening the door to knowledge about the universe. Science, which investigates all aspects of nature, from living creatures, inanimate objects, to the processes within them, provides extensive knowledge for students who are studying. Effective science learning does not only focus on memorizing formulas and theories, but also stimulates curiosity, critical thinking skills, and creates a love of the world of science in students (Rudnick, 2012). A fun approach to teaching science can make it easier for students to understand scientific principles and apply them in everyday life (Dwi, 2012).

Natural Sciences or Natural Sciences is a field of study that explores natural phenomena and everything around us. The aim is to stimulate students' curiosity and scientific attitudes, support their understanding of basic concepts in science, and prepare them to continue their education to a higher level (Virginingsih, 2013). The use of audio-visual learning media, as suggested by Sukmadewi & Suniasih (2022), can be an effective means of improving Natural Sciences (Science) learning in elementary schools. Implementing powtoon-based learning media is one way to support improving the quality of science at this learning level (Arif & Muthoharoh, 2021a). Elementary science learning outcomes can be measured through various aspects, including other knowledge, science process skills, scientific attitudes, and communication skills (Sukamti & Sutrisno., 2011).Learning Natural Sciences (Science) at the Elementary School (SD) level has a significant role in preparing students with basic scientific knowledge and skills. Through science, students can gain an understanding of natural phenomena and develop critical, logical and creative thinking skills.

However, learning Natural Sciences (Science) in Elementary Schools (SD) often faces challenges, such as a lack of student interest and motivation to learn. This factor can be caused by the use of learning methods that are monotonous and less attractive to students. Implementing powtoon-based audio visual learning media can be an effective solution for improving the quality of science learning at the elementary school level (Thesarah et al., 2021). Teachers have flexibility in choosing various evaluation methods to measure the achievement of Natural Sciences (IPA) learning outcomes in Elementary Schools (SD), so that they can ensure that all students achieve the set learning goals.

Therefore, innovation is needed in science learning to increase students' interest and motivation in learning (Mulyosari & Khosiyono, 2023). One innovation that can be used is the use of Powtoon-based audio visual learning media (Hanipah & Saputra, 2022). This media includes all tools that can be used to communicate information and learning techniques with the aim of arousing student interest and interest in the educational process. Powtoon-based audio visual learning media is a learning aid that includes everything that can be used to stimulate students' thoughts, emotions, attention and abilities, with the aim of speeding up the learning process. Powtoon is an online animation platform that allows users to create interesting and interactive animated presentations (Ayuningtyas & Suhandiah, 2022). Powtoon is equipped with various features such as animation, images, video and audio which can be used to create interesting presentations (Putri dkk., 2022).

This research hopes that the use of Powtoon-based audio visual learning media in natural science learning in elementary schools is believed to be able to increase learning effectiveness as well as student learning outcomes. This is because Powtoon-based audio visual learning media has several advantages, Powtoon can create attractive and interactive presentations so it can foster students' interest and enthusiasm for learning, Powtoon can present information visually and is easy for students to understand, Powtoon can help increase student concentration

in learning , powtoon can help increase student creativity in learning.

There is low interest and enthusiasm for learning among students, many elementary school students feel bored and not interested in science lessons in class (Jariyah et al., 2024). Because this is triggered by learning methods that are less interesting and less varied. Limited classroom space. Small classrooms and limited learning resources in schools can hinder an effective science learning process. Students' lack of understanding of science concepts. Students often have difficulty understanding science concepts because they only learn theory in class without practicing it directly (Ayuwandari & Suparman, 2019a).

Powtoon, a solution for learning science in elementary schools, can help improve student learning outcomes using various methods, namely using audio-visual media based on Powtoon, which can make natural science learning in elementary schools more interesting and interactive (Arif & Muthoharoh, 2021b). This can increase students' interest and enthusiasm for learning. Students will be more encouraged to choose learning and be active in the teaching and learning process, they can increase student concentration with the animations and sounds contained in Powtoon which can help increase student concentration (Nurrita, 2018).Students will focus more on the learning material and will not be easily distracted by other things.

This systematic review must present an attractive and interactive presentation format with dynamic animations, images, video and audio(Silitonga & Rosyida, 2015).This can attract students' attention and also increase students' interest in participating in learning. Education experts can use this information to increase science education capabilities in elementary schools (Lubis, 2023).Considering how important the use of Powtoon-based audio-visual methods is in science education, this research is intended to carry out a systematic review in this paper, which contains the impact of using Powtoon-based audio-visual learning media.

This research aims to systematically review the latest literature regarding the influence of the use of Powtoon-based audiovisual learning media on Natural Sciences (Science) learning outcomes at the elementary school level. It is hoped that this literature review will provide valuable insight for educational practitioners and researchers about the potential of Powtoon media in increasing science learning achievement in elementary schools. This research is important because it examines how the application of Powtoon as a learning medium affects students' science learning outcomes in elementary schools. The results are expected to provide valuable information to teachers and researchers regarding the effectiveness of Powtoon in improving students' science understanding and learning achievement in elementary schools.

Method

A systematic literature review is an approach used to collect and analyze existing research articles on a particular topic. This process involves a structured search for articles, evaluation of their quality, and synthesis of the findings to provide a comprehensive picture of current knowledge on the topic. The goal is to present an evidence-based overview of current knowledge on the topic, with a focus on themes, trends, gaps, and potential future research areas. Systematic literature research is usually applied in various fields to provide information that supports research, policy making and decision making (Prasetya et al., 2023).

Systematic literature reviews can be used in a variety of fields, including science, technology, medicine, and society. This review can be a useful tool for researchers, practitioners and policy makers. The internal procedures of a structured literature review require careful

planning and attention to detail in the data collection and analysis process. The results of this review provide important value for academics, practitioners, and decision makers who wish to understand and obtain the latest understanding in a particular field of knowledge (Pengetahuan et al., 2012).

The importance of SLR has grown as the amount of information available has increased, leading to the development of automation methods to reduce costs and increase efficiency. These methods, including the use of AI techniques, aid the SLR process and contribute to the development of this field. Overall, SLR plays an important role in providing a comprehensive understanding of the research topic and guiding future research directions (Ayuwandari & Suparman, 2019b).

Inclusion Criteria

This research concentrates on discussing literature reviews related to articles published in academic databases in 2019–2023. In May 2023, searching for articles was carried out on scholar.google.com using the keywords "powtoon-based audio visual science learning elementary school". Information collected from Google Scholar with a focus on "article type documents" is also grouped according to title and abstract which contain words such as audio visual, powtoon based, elementary school, science learning. Research includes article evidence, screening and screening of articles, as well as article analysis. The methods of research in this research are depicted in Figure 1.

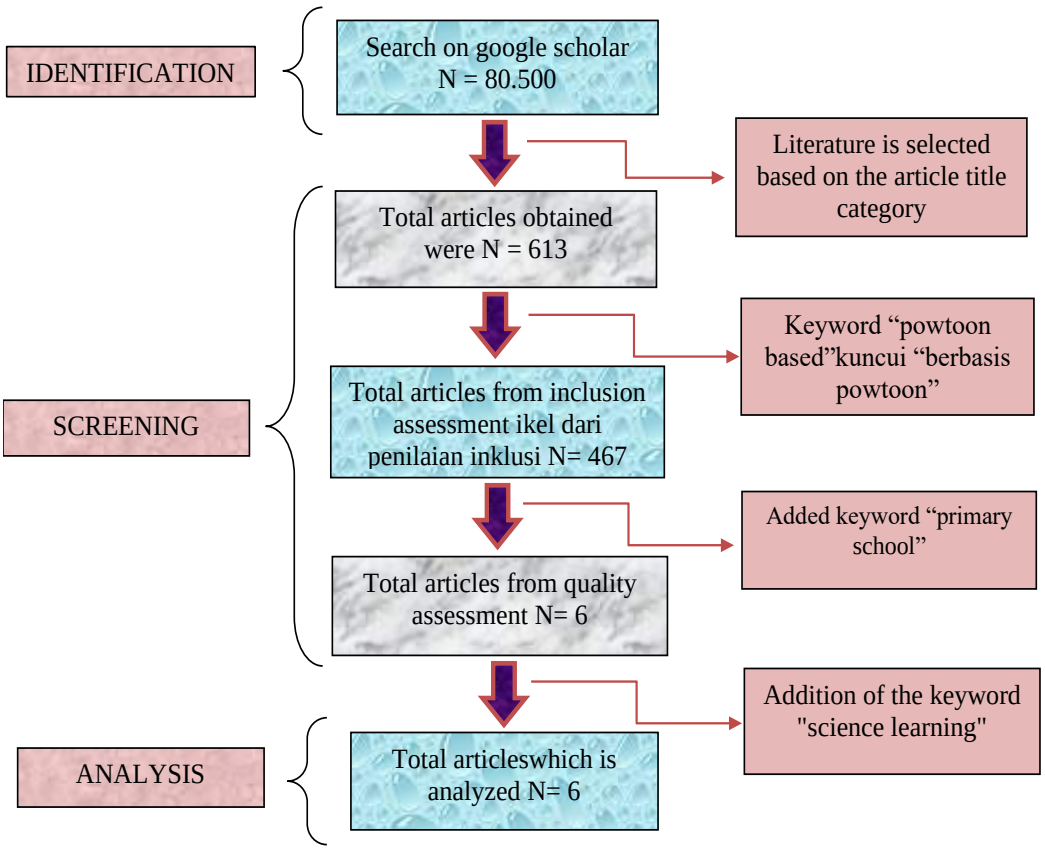

Figure 1. Document search process for articles in a systematic review

Results

The article search stage begins by opening the Google Scholar database at the URL https://scholar.google.com/. Article searches need to be carried out in the first section via the

keyword "audio visual". After that, searches can be limited to articles published from 2019 to 2023. Article searches can be carried out in May 2024. 80,500 results were found for various types of documents after searching via keywords in question. Figure 2 displays search results forthekeyword"audiovisual".

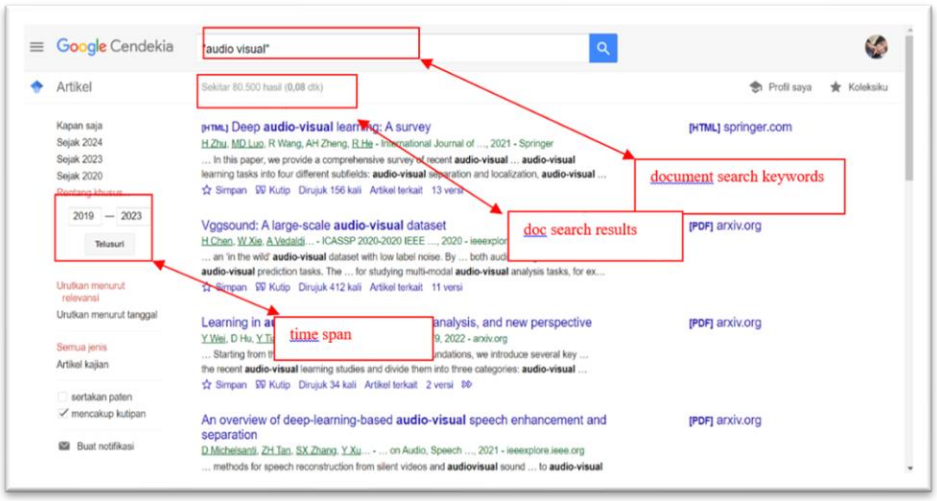

Figure 2. Stage 1 search process with the keyword "audio visual".

The phase 1 search yielded 80,500 documents of various file types. Stage 2 search produced 613 articles from the Google Scholar database with the keyword "powtoon-based" and the insertion of the word "AND" in both keywords. The stage 2 search in the Google Scholar database produced 613 articles. Figure 3 below shows a comprehensive overview of the stage 2 search.

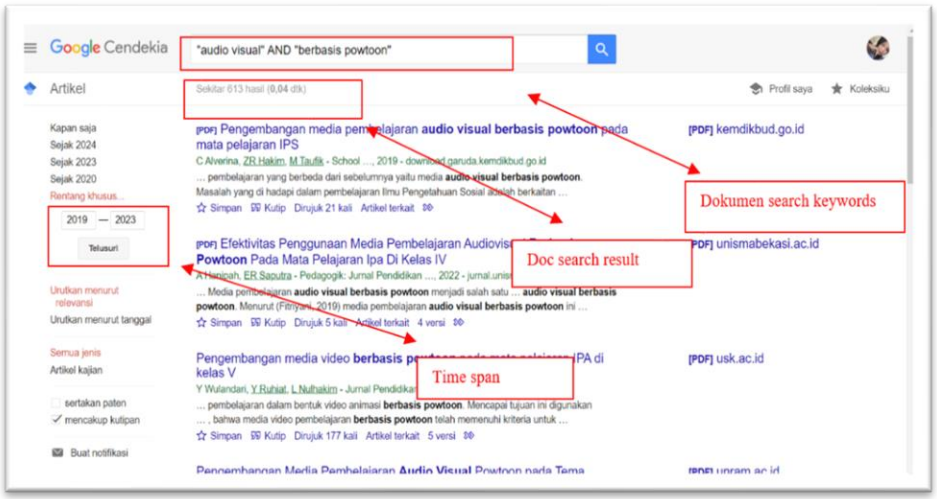

Figure 3. Stage 2 of the search process with the addition of the keyword: "powtoon-based".

613 documents with various file types were found in the second phase of the search. Stage 3 search was carried out by adding the keyword "primary school" and adding the word "AND" between the second and third keywords to get more specific articles for analysis. Stage 3 search in the Google Scholar database produced 467 articles. Figure 4 below shows an overview comprehensive of phase 3 search.

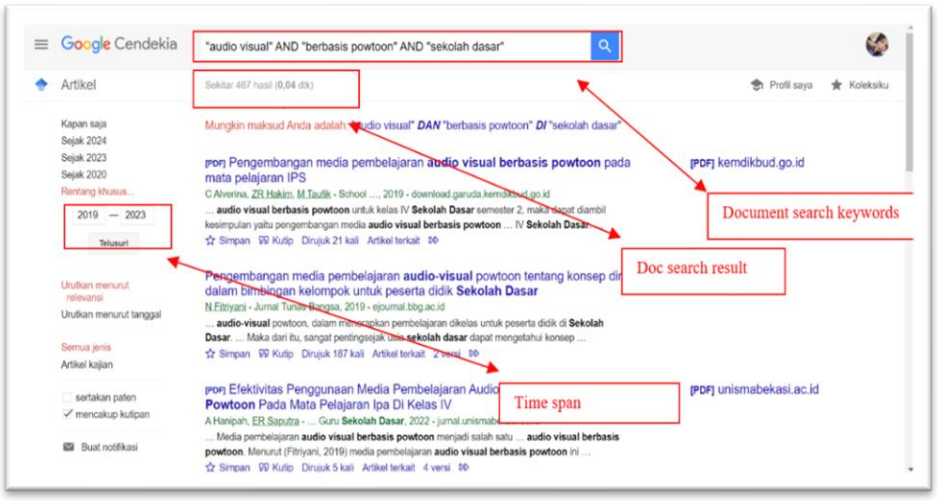

Figure 4. Stage 3 search process with the addition of the keyword: "primary school".

The 4th stage of the search produced 206 documents with various file types, by adding the keyword "science learning" and by adding the word "AND" between these keywords to get specific results. The stage 4 search in the Google Scholar database produced 206 articles. Figure 5 below shows a comprehensive overview of the stage 4 search.

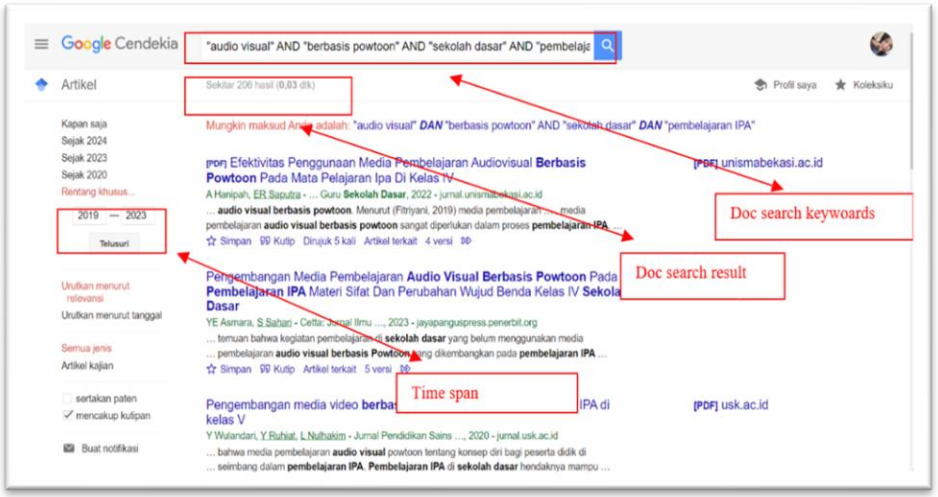

Figure 5. Stage 4 search process with the addition of the keyword "science learning"

For the fifth stage of data collection, documents must be selected in the form of journal articles. Ignore other non-searchable documents, such as books, proceeding articles, theses or HTML pages. Of the 206 existing articles, some are outside the topic of discussion for the following reasons: 1) The articles do not discuss specific research subjects, so they cannot be included in the analysis of audio-visual effectiveness; 2) The article does not discuss learning in elementary schools as a whole, it only mentions several topics related to learning in elementary schools; and 3) The article does not thoroughly discuss learning in elementary schools. After stage 4 was carried out, 6 articles were obtained for review.

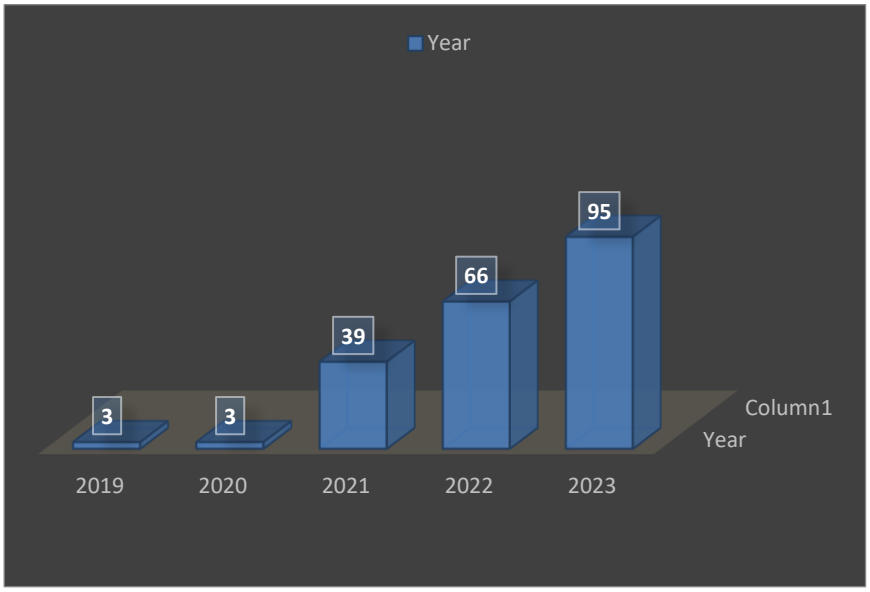

Chart 1. Number of article publications

The bar chart shows the number of article publications that use the keyword jigsaw learning model in science learning in elementary schools. In 2019, there were 3 articles published, and this number did not increase or decrease to remain 3 articles in 2020. In 2021, there was an increase with 36 new articles, bringing the total to 42 articles. From 2019 to 2023, a total of 206 related articles were found. In 2022 there was an increase of 30 articles, reaching a total of 66 articles, and in 2023, there was an increase with 29 new articles, bringing the total number to 99 articles. After going through a search and collection process, six articles were selected for evaluation, and the evaluation results are documented in Table 1.

Table 1. Findings

No.	Article	Field of Study	Research Results
1.	The application of powtoon media in learning material on changes in the shape of objects towards improving the learning outcomes of class III students (Sintia Amilia, Dewi Rahayu 2023)	Evaluate the obstacles in implementing powtoon media in learning	This research will provide information about how effective the use of powtoon media is. If this research is successful, the results will show the level of effectiveness of powtoon media in the context studied.
2.	Analysis of the use of Powtoon media to increase students' interest in learning in grade 5 thematic learning at SD Negeri Karang Tengah 11, Tangerang City (Ahmad	Powtoon Evaluating thematic learning to increase reading interest using Powtoon media	The results of research on the use of Powtoon media to increase students' interest in learning in thematic learning show that in general, the statements contained in the questionnaires distributed

	Arif Fadilah, M.Pd, Irna Sukmawati 2022)		received a percentage that reached high or medium criteria.
3.	The influence of the Project Based Learning Model assisted by Powtoon media on science learning outcomes (Ariska setya Widyaningrum, Dewi Nilam Tyas 2023)	Evaluating Collaboration on Student Learning Outcomes in the project based learning model assisted by Powtoon media.	The research results show that the application of the project based learning model using Powtoon media can increase student activity in learning activities by involving various activities according to the established structure.
4.	Improving Class V Student Learning Outcomes through the application of powtoon audio visual learning media (sukis 2022)	PowtoonEvaluating improvements in elementary schools using Powtoon Audio Visual Learning Media Application	The research results show that students show high enthusiasm in participating in learning, they are more responsive, active in asking questions, and active in providing answers.
5.	Powtoon video media to improve elementary school science learning outcomes material on plant vegetative development (Muakhirin 2022)	Evaluating the level of achievement of plant vegetative reproduction on Powtoon video media	The use of Powtoon video learning media has been proven to increase students' understanding at SD Negeri Cibuk Lor regarding the vegetative reproduction of plants, and the positive response from students to the application of this media shows that students like the use of this media
6.	The use of Powtoon video learning media at SD Negeri Cibuk Lor (Ani Hanipah 2022)	Evaluating the usefulness of powtoon-based audiovisual learning in elementary schools	The research results show that the use of Powtoon-based audiovisual learning can increase learning motivation, create a fresh learning atmosphere, and help students understand the material more easily.

Discussion

By referring to the results of the analysis of 6 articles that have been realized, several findings in the context of this research, some of which are:

1. The research is integrated with Audio Visual learning media based on Powtoon for the last 6 years (2019 – 2023) in elementary schools and is still being widely studied by researchers.
2. Powtoon-based Audio Visual learning media helps improve student learning outcomes, making science learning in elementary school more interesting and interactive.
3. Audio Visual Powtoon based learning media can be applied to various subjects in elementary schools, including science.

The use of powtoon-based audio visual learning media remains widespread in elementary schools, as can be seen from search results on Google Scholar. Of the 206 search results using the keyword education-based educational media, there are 5 articles that specifically discuss its use in elementary schools. This data shows that around 16.667% of searches related to digital learning focus on the use of audio-visuals in elementary schools, while the other 200 search results are not relevant to the educational context.

Based on a literature review of 6 articles, research conducted by Sintia Amalia (2023) shows that learning about the shape of objects using powtoon-based audio visual media has a significant impact. This can be seen from the results of the t test analysis (2-tailed) which shows a significance value of 0.01, which is smaller than the alpha value that is generally used (0.05). These results indicate that the null hypothesis (Ho) is rejected and the alternative hypothesis (Ha) is accepted, which means that there is a significant relationship between test scores before and after the implementation of learning at SDN Kertajaya IV/210 Surabaya.

Research conducted by Ariska Setya Widyaningrum (2022) using a project based learning model with the help of Powtoon media showed that there was a significant increase in learning outcomes. The experimental class experienced an increase of 0.7309 (high category), while the control class experienced an increase of 0.6283 (medium category). These findings indicate that the use of a project-based learning model with Powtoon media has a greater impact in improving science learning outcomes.

The latest research conducted by Muakhirin (2022) shows that the use of Powtoon videos before innovation resulted in an average score below the KKM value set by the school, namely 54.12, with a student completion rate of only 35.29% or 6 students. However, after the innovation, there was a significant increase in student learning outcomes. In cycle 1, the average learning outcome increased to 67.65 with a completion rate reaching 64.71% or 11 students. Then, in cycle 2, the average learning outcome increased again to 74.12 with a completion rate reaching 94.11% or 16 students. This shows that the use of learning media in the form of video clips is effective in increasing students' understanding of the lesson material presented.

The next research conducted by Ahmad Arif Fadilah (2022) investigated the use of powtoon media by analyzing the percentage diagram of students' interest in learning. The results showed that female students experienced an increase in interest in learning with 10 positive statements getting an average percentage between 60.42% - 75.00% (High Criteria) and 10 negative statements getting an average percentage between 45.83% - 56.25 % (Medium Criteria). Meanwhile, male students also showed a positive response to powtoon media with 10 positive statements getting an average percentage between 47.50% - 57.50% (Low and Medium

Criteria) and 10 negative statements getting an average percentage between 55 .00% - 77.50% (High and Medium Criteria).

Additional research conducted by researcher Sukis (2022) applied the audio visual learning media Powtoon, and the results of his research concluded that the use of Powtoon could improve student learning outcomes. This can be seen from the learning results of class V students, where before the action (Pre test), students' initial learning results reached 41.67% with an average score of 67.1. After taking action in cycle I, the percentage increase reached 66.67% with an average value of 73.8, and in cycle II, the percentage increased to 91.67% with an average value of 82.9. Apart from that, student activity scores also showed an increase from 3.3 (fair) in cycle I to 4.1 (good) in cycle II.

The results of research by Ani Hanipah (2022) show that the assessment of student activities in learning using Powtoon-based audio visual learning media is carried out using a Likert scale, where scores are given on criteria such as 4 (Very Good), 3 (Good), 2 (Enough), and 1 (Not enough). From the results of this research, it can be seen that the average student learning activity during learning using Powtoon-based audio-visual learning media in science subjects reached 83.3%. The average activity of these students is in the very good category according to the assessment carried out.

In 6 articles that conducted a literature review, all effects demonstrated a positive impact on science learning outcomes. These results require special attention, especially in terms of.

Impact of Using Powtoon-based Audio Visual Learning Media on Natural Sciences (Science) learning achievement

Based on the results of the analysis of the 6 articles above, Sintia Amalia's research (2023) shows that there is a significant relationship between test scores before and after using Powtoon media in learning the shape of objects at SDN Kertajaya IV/210 Surabaya. This shows that Powtoon media can help students understand the material better. Furthermore, Muakhirin's research (2022) showed an increase in student learning outcomes from an average below the KKM to 74.12 with 94.11% completion after using Powtoon videos in learning Solar System material. Then the impact of utilization can improve learning outcomes. Research by Ariska Setya Widyaningrum (2022) shows an increase in learning outcomes for the experimental class using the project based learning model assisted by Powtoon media by 0.7309 (high criteria), compared to the control class which only experienced an increase of 0.6283 (medium criteria). Sukis' research (2022) shows an increase in learning outcomes for class V students from 67.1 to 82.9 after using Powtoon audio visual media in learning Classification of Living Creatures material. Meanwhile, Ahmad Arif Fadilah's research (2022) shows the results of the percentage of students' positive learning interest in using Powtoon media, with an average of between 60.42% - 77.50%. Furthermore, Ani Hanipah's research (2022) shows that the average student learning activity during the learning process using Powtoon-based audio-visual learning media in science subjects reached 83.3%, which is included in the very good category.

Based on the results of the literature review, the use of Powtoon-based audio visual learning media can have a positive impact on Natural Sciences (IPA) learning by increasing students' understanding of the material, learning outcomes, learning interest and learning activities. Powtoon has been proven to be an effective alternative for improving the quality of science learning in elementary schools, because it can be accessed by various types of learning needs, including students with disabilities. Powtoon media provides features such as alternative

text for images and videos, as well as audio transcripts for narration, which help students with disabilities access and understand lesson material. In addition, Powtoon allows students to be actively involved in science learning through interactive features such as quizzes, polls, and online discussions. The findings from these 6 articles show Powtoon's great potential in improving science learning in elementary schools. For the future, further research is needed to explore the potential of Powtoon in the context of science learning at other educational levels, as well as to develop more innovative learning models using Powtoon technology.

Conclusion

Based on the conclusions of the analysis, research on the use of Powtoon-based audio visual learning media in science learning in elementary schools is still relatively small. Powtoon-based audio visual learning media has proven effective in improving learning outcomes for science students in elementary schools. Powtoon-based audio visual learning media can make science learning in elementary schools more interesting and interactive. Powtoon-based audio visual learning media can be applied to various topics in science learning in elementary schools. The use of Powtoon-based audio visual learning media can increase students' motivation and learning activities in science learning in elementary schools. Teachers need to be provided with adequate training and knowledge about the use of Powtoon-based audio visual learning media. Further research needs to be carried out to develop effective learning models using Powtoon-based audio visual learning media.

Bibliography

Arif, S., & Muthoharoh, A. A. (2021a). Penggunaan Media Audio Visual Berbasis Powtoon Untuk Meningkatkan Kemampuan Representasi IPA Di Tengah Pandemi Covid 19. *Jurnal Dimensi Pendidikan Dan Pembelajaran*. https://api.semanticscholar.org/CorpusID:248370339

Arif, S., & Muthoharoh, A. A. (2021b). Penggunaan Media Audio Visual Berbasis Powtoon Untuk Meningkatkan Kemampuan Representasi IPA Di Tengah Pandemi Covid 19. *Jurnal Dimensi Pendidikan Dan Pembelajaran*. https://api.semanticscholar.org/CorpusID:248370339

Ayuwandari, G. & Suparman. (2019a). *yang sepenuhnya belum menuntun siswa untuk berfikir kreatif akan menghambat siswa dalam memahami konsep dan memecahkan masalah di kehidupan sehari-hari. Penelitian ini bertujuan untuk mendeskripsikan bahan ajar yang sesuai dengan karakteristik siswa dan dapat meningkatkan kreativitas siswa dalam pem*. https://api.semanticscholar.org/CorpusID:198161705

Ayuwandari, G. & Suparman. (2019b). *yang sepenuhnya belum menuntun siswa untuk berfikir kreatif akan menghambat siswa dalam memahami konsep dan memecahkan masalah di kehidupan sehari-hari. Penelitian ini bertujuan untuk mendeskripsikan bahan ajar yang sesuai dengan karakteristik siswa dan dapat meningkatkan kreativitas siswa dalam pem*. https://api.semanticscholar.org/CorpusID:198161705

Dwi, W. (2012). *Peningkatan Kualitas Pembelajaran IPA MelaluiPendekatan Direct Instruction Pada Siswa Kelas V SDN KalisalakMagelang*. https://api.semanticscholar.org/CorpusID:142028531

Efendi, F. M., GustiBujang, A., & Margiati, K. (2013). *MENINGKATKAN AKTIVITAS BELAJAR SISWA DENGAN MENGGUNAKAN METODE KERJA KELOMPOK PADA PEMBELAJARAN ILMU PENGETAHUAN ALAM KELAS IV SEKOLAH DASAR NEGERI 05 SUNGAI KINJIL*.

https://api.semanticscholar.org/CorpusID:179002784
Hanipah, A., & Saputra, E. R. (2022). EFEKTIVITAS PENGGUNAAN MEDIA PEMBELAJARAN AUDIOVISUAL BERBASIS POWTOON PADA MATA PELAJARAN IPA DI KELAS IV. *PEDAGOGIK (JURNAL PENDIDIKAN SEKOLAH DASAR)*. https://api.semanticscholar.org/CorpusID:265814342
Jariyah, A., Puspitaningtyas, A. R., & Husein, A. M. (2024). PENGARUH MEDIA INTERAKTIF ANIMASI TERHADAP MINAT BELAJAR PADA MATA PELAJARAN IPA SISWA KELAS IV DI SDN 1 TRIBUNGAN KECAMATAN MLANDINGAN TAHUN AKADEMIK 2022/2023. *CENDEKIA PENDIDIKAN*. https://api.semanticscholar.org/CorpusID:268236714
Liriwati, F. Y. (2023). Transformasi Kurikulum; Kecerdasan Buatan untuk Membangun Pendidikan yang Relevan di Masa Depan. *Jurnal IHSAN : Jurnal Pendidikan Islam*. https://api.semanticscholar.org/CorpusID:260647413
Lubis, L. H. (2023). PENGGUNAAN VIDEO SEBAGAI MEDIA EFEKTIVITAS PEMBELAJARAN UNTUK SISWA SEKOLAH DASAR IT ROBBANI RANTAUPRAPAT. *Tarbiyah Bil Qalam : Jurnal Pendidikan Agama Dan Sains*. https://api.semanticscholar.org/CorpusID:268189457
Mulyosari, E. T., & Khosiyono, B. H. C. (2023). Pengaruh Penggunaan Media Pembelajaran Berbasis Teknologi dalam Pembelajaran terhadap Motivasi Belajar Siswa Sekolah Dasar. *EDUKATIF : JURNAL ILMU PENDIDIKAN*. https://api.semanticscholar.org/CorpusID:266896756
Nurrita, T. (2018). PENGEMBANGAN MEDIA PEMBELAJARAN UNTUK MENINGKATKAN HASIL BELAJAR SISWA. *MISYKAT: Jurnal Ilmu-Ilmu Al-Quran, Hadist, Syari'ah Dan Tarbiyah*. https://api.semanticscholar.org/CorpusID:187073227
Pengetahuan, I., BerBagai, Sos. D., Dalam, P., akUntanSi, kaJian, Djamhuri, A., lebih, manfaat kepada, Pengetahuan, I., Dan, S., Paradigma, B., Kajian, D., melakukannya, rani dan mau, & mereka, biasanya hanya. (2012). *Abstrak: Ilmu Pengetahuan Sosial dan Berbagai Paradigma dalam kajian akuntansi. Diskursus akuntansi di Indonesia saat ini bisa mengilustrasikan cara pandang monolitik yang dominan. Selain ilmu ekonomi, ilmu pengetahuan sosial, terutama sosiologi, terkesan masih relatif jarang dipakai sebagai alat an*. https://api.semanticscholar.org/CorpusID:56238558
Prasetya, A. D. C., Esmono, A. Z. H., & Hafshoh, F. A. (2023). Metode Systematic Literature Review Untuk Mengidentifikasi Pengaruh Sistem Informasi Manajemen Terhadap Kinerja Organisasi. *Journal of Comprehensive Science (JCS)*. https://api.semanticscholar.org/CorpusID:268980577
Ramadhan, M. S., Apriliani, S. D., Firjatullah, N. S., & Pratama, R. Y. P. (2023). Dampak Perkembangan Teknologi Digital Di Sektor Pendidikan. *Journal of Comprehensive Science (JCS)*. https://api.semanticscholar.org/CorpusID:268947714
Rudnick, K. dan. (2012). *Seluruh komponen pendidikan dan perubahan paradigma pembelajaran tersebut merupakan rangkaian yang diarahkan dapat membawa kemajuan pendidikan secara paripurna menuju kemajuan dunia pendidikan, meskipun kenyataannya masih banyak masalah yang berhubungan dengan kualitas pendidikan. Tinjauan terhadap*. https://api.semanticscholar.org/CorpusID:48014705
Silitonga, M. K., & Rosyida, S. (2015). *Animasi Interaktif Sebagai Media Sosialisasi Infonesia Tsunami Early Warning System (INATEWS)*. https://api.semanticscholar.org/CorpusID:192348398
Sukamti & Sutrisno. (2011). *Penerapan pendekatan sains teknologi masyarakat untuk meningkatkan aktivitas dan hasil belajar IPA siswa kelas III SDN Kebonsari 4 Kota Malang / Windra Septi Mulyanti*. https://api.semanticscholar.org/CorpusID:190005244

Thesarah, R. H., Subagiyo, L., & Qadar, R. (2021). Penggunaan media pembelajaran interaktif berbasis audio-visual dengan aplikasi powtoon untuk meningkatkan minat dan hasil belajar siswa pada materi impuls dan momentum di SMK Negeri 6 Samarinda. *Jurnal Kajian Pendidikan IPA*. https://api.semanticscholar.org/CorpusID:261765214

Virginingsih, M. (2013). *PENGGUNAAN MEDIA AUDIO VISUAL UNTUK MENINGKATKAN MINAT DAN HASIL BELAJAR SISWA (Studi Kasus Pada Kelas VIII-F SMP Negeri 2 Balung Jember Tahun Ajaran 2010/2011 Pada Mata Pelajaran IPS Sub Pokok Bahasan Macam-Macam Pasar)*. https://api.semanticscholar.org/CorpusID:232838297