PIONIR Jurnal Pendidikan
P-ISSN 2339-2495
E-ISSN 2549-6611

PIONIR: JURNAL PENDIDIKAN
VOLUME 14 No 3 2025
P-ISSN 2339-2495/E-ISSN 2549-6611

LITERATURE REVIEW : DEVELOPMENT OF AUDIO VISUAL MEDIA TO IMPROVE LEARNING OUTCOMES IN ELEMENTARY SCHOOLS

Muhammad Fa'iz Annur*

***Universitas Negeri Semarang, Indonesia

muhammadfaizannur@students.unnes.ac.id

Muhammad Harlanu

Universitas Negeri Semarang, Indonesia

harlanu@mail.unnes.ac.id

Bambang Subali

Universitas Negeri Semarang, Indonesia

bambangfisika@mail.unnes.ac.id

Ellianawati

Universitas Negeri Semarang, Indonesia

ellianawati@mail.unnes.ac.id

Received 22 May 2025, Accepted 26 December 2025, Published 30 December 2025

Abstract

This study is a literature review that aims to review various scientific articles on the development of audio-visual media in improving elementary school students' learning outcomes in the period 2020 to 2025. The main focus of the study is what models are used and how the results are in improving student learning outcomes. This article is a literature review that uses content analysis techniques with a Systematic Literature Review (SLR) approach based on Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA). Data collection was carried out by searching for articles in relevant national journals using the Publish or Perish (PoP) application with the Google Scholar database. The initial identification process resulted in 500 articles. Next, a screening stage was carried out based on the inclusion criteria, namely: (1) articles in accordance with the focus and keywords of the research, (2) articles published in accredited national journals, (3) articles in the form of empirical research results, and (4) articles published within the specified year range. The exclusion criteria include: (1) articles that are not relevant to the research topic, (2) duplicate articles, (3) articles in the form of opinions or non-scientific reviews, and (4) articles that are

not fully accessible. Through this selection stage, 6 articles were obtained that met the criteria for further analysis in the content analysis stage. The results of the literature review of most studies using the ADDIE and Borg and Gall development models show that the use of audio-visual media can significantly improve student learning outcomes. This finding confirms that the integration of audio-visual media in learning in elementary schools has great potential to improve the quality of education. Therefore, support is needed from teachers, schools, and policy makers to continue to develop and utilize technology-based learning media optimally.

Keywords: Audio Visual Media, Learning Outcomes, Elementary School, Development, Article Review

Abstrak

Penelitian ini merupakan tinjauan pustaka yang bertujuan untuk meninjau berbagai artikel ilmiah tentang perkembangan media audio-visual dalam meningkatkan hasil belajar siswa sekolah dasar pada periode 2020 hingga 2025. Fokus utama penelitian ini adalah model apa yang digunakan dan bagaimana hasilnya dalam meningkatkan hasil belajar siswa. Artikel ini merupakan tinjauan pustaka yang menggunakan teknik analisis isi dengan pendekatan Tinjauan Pustaka Sistematis (SLR) berdasarkan Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA). Pengumpulan data dilakukan dengan mencari artikel di jurnal nasional yang relevan menggunakan aplikasi Publish or Perish (PoP) dengan basis data Google Scholar. Proses identifikasi awal menghasilkan 500 artikel. Selanjutnya, dilakukan tahap penyaringan berdasarkan kriteria inklusi, yaitu: (1) artikel sesuai dengan fokus dan kata kunci penelitian, (2) artikel yang diterbitkan di jurnal nasional terakreditasi, (3) artikel berupa hasil penelitian empiris, dan (4) artikel yang diterbitkan dalam rentang tahun yang ditentukan. Kriteria eksklusi meliputi: (1) artikel yang tidak relevan dengan topik penelitian, (2) artikel duplikat, (3) artikel berupa opini atau ulasan non-ilmiah, dan (4) artikel yang tidak sepenuhnya dapat diakses. Melalui tahap seleksi ini, diperoleh 6 artikel yang memenuhi kriteria untuk analisis lebih lanjut pada tahap analisis konten. Hasil tinjauan pustaka dari sebagian besar studi yang menggunakan model pengembangan ADDIE dan Borg dan Gall menunjukkan bahwa penggunaan media audio-visual dapat secara signifikan meningkatkan hasil belajar siswa. Temuan ini menegaskan bahwa integrasi media audio-visual dalam pembelajaran di sekolah dasar memiliki potensi besar untuk meningkatkan kualitas pendidikan. Oleh karena itu, dukungan diperlukan dari guru, sekolah, dan pembuat kebijakan untuk terus mengembangkan dan memanfaatkan media pembelajaran berbasis teknologi secara optimal.

Kata kunci: Media Audio Visual, Hasil Belajar, Sekolah Sasar, Pengembangan, Tinjauan Artikel

INTRODUCTION

Technological developments have brought significant changes to the world of education, both in the learning process and school management. The use of technology as a learning medium enables a more effective teaching and learning process that is relevant to students' needs (Akhmadan, 2017; Dewi & Hilman, 2019). In the 21st-century era of education, teachers are required to be able to innovate by utilizing advances in science and technology to move away from conventional methods and towards more modern, engaging, and meaningful learning (Sole & Anggraeni, 2018). Therefore, the development of technology-based learning media, especially audio-visual media, is a strategic alternative to improve the motivation and learning outcomes of elementary school students.

Learning using media can help students improve their learning outcomes. Learning outcomes are behavioral changes that occur in students after experiencing the learning

process. These changes can be in the form of knowledge, skills, and attitudes (Sudjana, 2009). The learning process always utilizes various media, the role of media in this case is as a means of supporting success in the learning process. The development of media used in the learning process is basically accompanied by the development of technology (Benny, 2017). Learning is no longer only done in the classroom using books and handwriting, but has used technology as a learning medium. This aims to make learning easier and more enjoyable for students (Fricticarani et al., 2023). With the development of increasingly sophisticated technology, its utilization has expanded into various sectors, including the field of education. Technological advancement encourages innovation in learning processes, particularly through the integration of learning media that support the achievement of educational goals (Sarwendah et al., 2023). In this context, learning media play an important role as intermediaries that convey messages from teachers to students in order to stimulate students' thoughts, feelings, attention, and learning interest (Tafonao, 2018). One form of learning media that has developed rapidly along with technological progress is video-based media.

The use of video media has been proven to provide positive impacts on the learning process, such as increasing students' interest, motivation, and enthusiasm, while creating learning experiences that are more engaging, enjoyable, effective, and efficient (Pamungkas & Koeswanti, 2022). However, despite these advantages, the utilization of audio-visual media in elementary schools is still not optimal and tends to be limited to conventional presentations, indicating a gap between technological potential and its actual implementation in classroom learning.The development of Science and Technology (IPTEK) today greatly helps educators to be more creative in creating learning media. Even though the development of Science and Technology has given rise to many social symptoms and changes in society, it does not mean that educators avoid and do not want to follow existing developments. Learning media in general are teaching aids or aids in the learning and teaching process. Learning media can be in the form of books, sound, video images and so on. Learning media are used to improve better learning outcomes (Triyadi, 2015).

Learning media has various types that can be selected and used in the classroom such as visual media, audio media, audio-visual media, print media and others. Of the various types of learning media, audio-visual media is a media that can be received by the senses of sight and hearing (Purnaningsih, 2017). This method is considered more appropriate, faster and easier than through talking, thinking and stories about educational experiences. Audio-visual media is a type of media that in addition to containing elements of sound, also contains elements of images that can be seen. This media involves the senses of hearing and sight at the same time in one process (Nasution et al., 2023).

Audio-visual media is one type of media that can be used in learning. Audio-visual media is essentially an intermediary media or the use of materials where absorption is through the senses of sight and hearing which aims to show real educational experiences to students (Purnaningsih, 2017). The use of audio-visual media is considered very appropriate to improve student learning outcomes, especially in abstract or conceptual subjects. This media can attract students' attention, arouse learning motivation, and help explain concepts that are difficult to understand through lecture methods alone (Arsyad, 2015). This method is considered more appropriate, faster and easier than through talking, thinking and stories about educational experiences (Purnaningsih, 2017). One effective strategy to improve student understanding is to use learning media that combines audio and visual elements. Videos and films not only make learning more interesting, but also create an interactive atmosphere that

can stimulate motivation and encourage active student participation (Lubis, 2020). Audio-visual media is not only able to present information in the form of text, but also in the form of images, sound and video, which can help improve students' understanding and memory (Sadiman et al., 2010).

At elementary school level, students are at the concrete operational cognitive development stage, where the learning process will be more effective if accompanied by real visual and audio experiences (Piaget, in Suparno, 2011). Several studies have shown that the use of audio-visual media can significantly improve learning outcomes compared to conventional methods. For example, research by Sari and Margono (2020) showed an increase in elementary school students' science learning outcomes after implementing interactive learning video media. Similar findings were also found by Mustadi and Latifah (2019), who developed character-based audio-visual media for PPKn (Pancasila and Civic Education) learning and obtained positive results on students' understanding and grades. The development of audio-visual media in learning is also in line with the student-centered learning approach and contextual learning, where students become active subjects in gaining knowledge (Sugiyanto, 2009). In addition, media that is designed properly can also support learning differentiation, so that the needs of students with different learning abilities can be met (Heinich et al., 2002). However, there are still many teachers in elementary schools who have not utilized audio-visual media optimally, either due to limited resources or skills in developing media (Hamalik, 2011). Therefore, this study aims to develop audio-visual media that are in accordance with the characteristics of elementary school students and evaluate their effectiveness in improving learning outcomes.

The purpose of this study is a literature review research to analyze the development of audio-visual media to improve learning outcomes in elementary schools in 2020-2025. The benefits of this study are to provide theoretical and practical contributions in the field of education, especially related to the use of innovative learning media. Theoretically, this study enriches the study of the effectiveness of audio-visual media in improving student learning outcomes. This study is a literature review that examines the development of audio-visual media at the elementary school level in the period 2020–2025. The results of the study indicate that the most widely used development models in audio-visual media development are the ADDIE model, Borg & Gall, as well as several variations of the Research and Development (R&D) model adapted to the learning context in elementary schools. In general, the reviewed studies report that audio-visual media developed through these models have proven valid, practical, and effective in improving learning outcomes, motivation, and engagement of elementary school students. Media that is packaged contextually, displays concrete visuals, and is in accordance with the developmental characteristics of elementary school students has a positive impact on the understanding of learning concepts. Practically, the results of this study can be a reference for teachers in selecting or developing audio-visual media that are appropriate to the characteristics of elementary school students so that the learning process becomes more interesting and meaningful. In addition, this study is also useful for policy makers in schools as a consideration in procuring learning media that supports improving the quality of education, as well as being a basis for further researchers to develop more effective and contextual audio-visual media.

The novelty of this research lies in its focus on systematically examining the development of audio-visual media in the context of elementary schools in Indonesia in the 2020–2025 period using a PRISMA-based Systematic Literature Review approach. Unlike

previous studies that generally only discuss the effectiveness of audio-visual media in general or focus on one particular media product, this study groups and compares the development models used, such as ADDIE, Borg & Gall, and the modified R&D model, and relates them to the characteristics of elementary school students. Furthermore, this study highlights the trends in effective audio-visual media design, including the use of concrete visuals, contextual narratives, and thematic approaches that are appropriate to the cognitive developmental stage of elementary school students. Thus, this study not only presents a summary of previous research results but also provides a conceptual map regarding the direction of audio-visual media development in elementary schools that can serve as a foundation for the development of more relevant and contextual short film-based media in the future.

Based on the background above, this study examines the problem by conducting a literature review entitled Development of Audio Visual Media to Improve Learning Outcomes in Elementary Schools.

METHODS

This study aims to examine the development of audio-visual media to improve student learning outcomes in elementary schools. The method used is a *Systematic Literature Review* employing the Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA) framework, which consists of identification, screening, eligibility, and inclusion stages (Ariati & Juandi, 2022). Data collection was conducted using three main keywords, namely *"audio-visual media development"*, *"learning outcomes"*, and *"elementary school"*, applied to articles published between 2020 and 2025. The data sources were articles indexed in Google Scholar, retrieved through the Publish or Perish (POP) application.

At the identification stage, the initial search yielded 500 articles. Furthermore, inclusion criteria were applied, including: (1) articles published within the 2020–2025 period; (2) research focusing on the development of audio-visual learning media; (3) studies conducted in the context of elementary schools; (4) articles reporting development models and learning outcome results; and (5) full-text articles accessible for review. Meanwhile, exclusion criteria included: (1) articles not related to media development; (2) studies conducted outside the elementary school context; (3) review articles, opinion papers, or conference abstracts without empirical data; and (4) duplicate articles. Through the screening and eligibility stages based on these criteria, a number of relevant articles were selected and included in the final analysis.

The use of the Publish or Perish (POP) application with Google Scholar as the primary database was intentionally selected due to its ability to index a wide range of national and international journals, including open-access publications that are highly relevant to educational research in the elementary school context. Google Scholar was chosen because it provides broader coverage compared to other databases, particularly in capturing studies published in local and regional journals that often report the development of instructional media in elementary schools. This consideration is important given that many studies on audio-visual media development in the elementary education context are published in national journals that may not be indexed in databases such as ERIC or DOAJ.

Furthermore, the use of a single database was intended to ensure consistency in the search process and to avoid data duplication across databases. Nevertheless, to maintain the rigor of the review, strict inclusion and exclusion criteria were applied, and the PRISMA framework was followed systematically to minimize selection bias. Therefore, although the data source was limited to Google Scholar, the methodological procedures employed ensured that the findings remain valid and representative of research trends in audio-visual media development for elementary schools.

In the process of analyzing reports through PRISMA, the researcher presents the material shown in Figure 1 as follows.

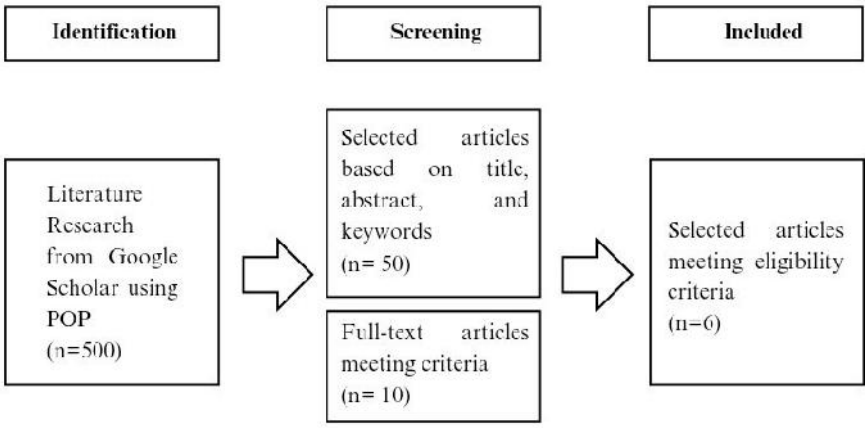

Figure 1. Flowchart Research

Based on the picture above, the next process follows the stages of identification, screening, eligibility, and included. The identification stage is carried out by reading the title and abstract to determine the relevance of the article to the theme found there are 500 articles. At the screening stage, articles that do not have full-text PDF access, articles in the form of books, book chapters, proceedings, and articles that do not specifically discuss elementary schools are set aside. At the eligibility stage, the researcher carefully re-reads the abstract and selects articles that meet the inclusion criteria. Finally, 50 articles were obtained that were appropriate and relevant for further analysis. At the inclusion stage, 6 articles were obtained to be used as samples.

RESULT AND DISCUSSION

The results of the analysis of the development of audio-visual media to improve learning outcomes in elementary schools from 500 journals taken using the PRISMA method and several stages, the results of the screening obtained 6 articles to be studied. The following are 6 journals that researchers present in table 1.

Table 1. Literature Review Result

Author	Heading	Method	Result
Janati et al., 2023	Development of Audio Visual Media in Thematic Learning to Improve Student Learning Outcomes	Borg and Gall	In the limited trial, the average value was 84, the total score was 41.5 and the average was 4.15 with a good category. In a broader trial, the average value was 89, the total score was 49 and the average was 4.45 with a good category. The conclusion of this study

Author	Heading	Method	Result
			shows that the Powtoon audio-visual media product is very feasible to be used in the process and can improve student learning outcomes in learning in class V of SD N Kedungbenda 01 Cilacap.
Tahajudin et al., 2023	Development Of Audio Visual Media To Improve Results Of Learning Social Studies In Grade V Elementary School Social Studies Materials	ADDIE	The results of the field trial for student responses to the media obtained 95.6% with a very feasible category and the results of student learning obtained an average value of 83.3%, the results of the teacher response trial to the media obtained 89.2%. Based on the results of the analysis of two experts and trials on students and teachers, the audio-visual media has met the criteria for use as a learning medium for Social Sciences (IPS).
Anggraini et al., 2024	Development of Audio Visual Media Powtoon to Improve Student Learning Outcomes on Grade V Elementary School Scale Material	ADDIE	The use of audio-visual media Powtoon is effective for student learning outcomes in grade V elementary school material with an average N-Gain value of 0.76, which is in the high category and obtains an N-Gain percentage of 76.00%.
Setiawati et al., 2024	Development of Audio Visual Learning Media to Improve Students' Learning Outcomes in Grade IV Science Subjects at SDN Gugus I Sekarbela	ADDIE	From this study is to produce a powtoon audio visual media product with a media feasibility level of 86% "very feasible" and material feasibility of 78% "feasible", media practicality based on teacher responses with a score of 100% "very practical" and student responses with a score of 92% "very practical" and powtoon media is effective in improving student learning outcomes in the science content.
Marhaini et al., 2025	Development of Audio Visual Learning Media to Improve Learning Outcomes in Science Subjects	ADDIE	From the analysis results, 10 students achieved the N-Gain classification "High" (≥ 0.7), with two students achieving the highest scores of 0.962 and 0.926, indicating that this audio- visual media is effective in improving understanding of the material. This study shows that audio-visual media plays an important role in overcoming the challenges of learning science.

Author	Heading	Method	Result
			on students' motivation and understanding, so it can be relied on as a technology-based learning approach.
Subhan et al., 2025	Development Of Audio Visual Media To Improve Students' Learning Outcomes In Pancasila Education Learning Using Capcut Application	ADDIE	Validation of audio-visual learning media in learning Pacasila Education class IV SDN 06 Koto Baru was assessed by three validators. With an average validation value of 85% with a very valid category. Practicality assessed by the homeroom teacher and 16 students for animated video learning media obtained an average of 96.86% with a very practical category. Effectiveness was assessed from student learning outcomes obtaining an average of 87.5% with a very effective category. By using this media, student learning outcomes are better than before.

Research conducted by (Janati *et al.*, 2023), with the title "Development of Audio Visual Media in Thematic Learning to Improve Student Learning Outcomes" resulted in (1) the results of the validation of audio visual media by experts, namely with an average of 4.9, a percentage of 98% with a very good category and an average of 4.4, a percentage of 88% with a very good category. Based on the validation results, the audio visual media is said to be very suitable for use. While the results of the audio visual media by stakeholder validation are with an average of 4.9 with a percentage of 98% with a very good category. So the audio visual media is very suitable for use (2) The use of Powtoon audio visual media in thematic learning for grade V students Theme 7 Events in Life Subtheme 2 Learning 4 SD N Kedungbenda 01 Cilacap has increased. Student learning outcomes in the last semester obtained an average score of 59. In the limited trial, the average score was 84, the total score was 41.5 and the average was 4.15 with a good category. In a broader trial, the average score was 89, the total score was 49 and the average was 4.45 with a good category. The conclusion of this study shows that the Powtoon audio-visual media product is very feasible to use in the process and can improve student learning outcomes in learning in class V of SD N Kedungbenda 01 Cilacap.

The study conducted by (Tahajudin *et al.*, 2023), with the title "Development of Audio Visual Media to Improve Social Studies Learning Outcomes in Social Studies Material for Class V Elementary Schools" resulted in the results of the product validity by two experts being in the very feasible category. From the material expert, a score of 88.6% was obtained and the media expert obtained a score of 87.5%. To determine the effectiveness of the media on the subject matter, a field trial was conducted at SD Negeri Montor 1. The results of the field trial for student responses to the media were 95.6% with a very feasible category and student learning outcomes obtained an average score of 83.3%, the results of the teacher response trial to the media were 89.2%. Based on the results of the analysis of two experts and trials on students and teachers, the audio-visual media has met the criteria to be used as a learning medium for

Social Sciences (IPS).

Research conducted by (Anggraini *et al.*, 2024), entitled "Development of Powtoon Audio Visual Media to Improve Student Learning Outcomes in Grade V Elementary School Scale Material" resulted in the assessment of the first and second media expert lecturers obtaining a percentage of 95% with the category "Very Eligible", the assessment of the first and second material expert lecturers obtained a percentage of 85.5%, with the category "Very Eligible" and the assessment from the class teacher obtained a percentage value of 94.4% with the category "Very Eligible". This shows that the Powtoon audio-visual media in mathematics learning on scale material is feasible to be used as a learning medium. Based on the results of the product trial with students, the learning outcomes were proven to have an increase of 67%. Before the product trial, the pretest percentage value was 27%, while after conducting the product trial with students, the posttest percentage value was 94%. Meanwhile, the results of student responses using Powtoon audio-visual media obtained a percentage of 95.3% with the category "Very Eligible". The use of Powtoon audio-visual media is effective for student learning outcomes on grade V SD scale material with an average N-Gain value of 0.76 in the high category and obtaining an N-Gain percentage of 76.00%.

Research conducted by (Setiawati *et al.*, 2024) with the title "Development of Audio Visual Learning Media to Improve Learning Outcomes of Grade IV Students in the Science Content of SDN Gugus I Sekarbela" resulted in this research and development producing audio visual media with product specifications including: (1) The audio visual learning media developed is in the form of powtoon media; (2) The powtoon media developed is equipped with a narrator's voice explanation on each slide. Powtoon audio visual learning media is included in the category of very suitable for use as learning media. The conclusion of this study is to produce a powtoon audio visual media product with a media feasibility level of 86% "very suitable" and material feasibility of 78% "suitable", media practicality based on teacher responses with a score of 100% "very practical" and student responses with a score of 92% "very practical" and powtoon media is effective in improving student learning outcomes in the science content.

Research conducted by (Marhaini *et al.*, 2025), entitled "Development of Audio Visual Learning Media to Improve Learning Outcomes in Science Subjects" resulted in the analysis results, 10 students achieved the N-Gain classification "High" (≥0.7), with two students achieving the highest scores of 0.962 and 0.926, indicating that this audio visual media is effective in improving understanding of the material. The learning media developed has been validated by experts and received positive responses from students and principals, who considered this media feasible and effective in improving student motivation and learning outcomes. This study shows that audio visual media plays an important role in overcoming the challenges of learning science and has a significant positive impact on student motivation and understanding, so that it can be relied on as a technology-based learning approach. Research conducted by Subhan et al., 2025 entitled "Development of Audio Visual Media to Improve Student Learning Outcomes in Pancasila Education Learning Using the Capcut Application" resulted in 1) Validation of audio visual learning media in Pancasila Education learning for class IV SDN 06 Koto Baru was assessed by three validators. With an average validation value of 85% with a very valid category. 2) Practicality assessed by the homeroom teacher and 16 students on the animated video learning media obtained an average of 96.86% with a very practical category. 3) Effectiveness assessed from student learning

outcomes obtained an average of 87.5% with a very effective category. By using this media, student learning outcomes are better than before.

Based on the analysis of various studies on audio-visual media development at the elementary school level, several key similarities and differences were identified in terms of development models, media effectiveness patterns, and the use of learning technology applications. In terms of development models, studies using the ADDIE model generally emphasize the stages of needs analysis and continuous evaluation, resulting in media that is practical and easy to implement in the classroom. Meanwhile, studies using the Borg & Gall model tend to produce more comprehensive products because they undergo systematic limited and extensive trials, although they require more time and resources.

In terms of media effectiveness, all studies show a relatively consistent pattern of findings: the audio-visual media developed were declared valid by experts with scores above 85% and significantly improved student learning outcomes. This improvement is demonstrated by increases in average learning outcomes, higher posttest scores compared to pretests, and N-Gain values in the moderate to high category (≥0.7). These findings indicate that audio-visual media are not only technically feasible but also effective in supporting the achievement of learning objectives in elementary schools.

Furthermore, there is a prominent trend in learning technology innovation, particularly in the use of Powtoon and CapCut applications as audio-visual media development tools. Powtoon is widely used due to its ability to present engaging animations, narratives, and visuals that align with the cognitive characteristics of elementary school students. Meanwhile, the use of CapCut demonstrates a new development in the use of video editing applications that are more flexible and closely aligned with the latest digital technology. This trend demonstrates a shift in audio-visual media development from conventional media to digital application-based media that are more interactive, contextual, and adaptive to technological developments. Overall, this synthesis demonstrates that despite the variety of development models and applications used, audio-visual media consistently has a positive impact on elementary school student learning outcomes, thus holding significant potential for continued development in the context of 21st-century learning.

This literature review study also uses VOSviewer to find out research trends. VOSviewer is a software used to create, visualize, and explore bibliometric maps. This tool is very useful in bibliometric analysis, especially to display relationships between scientific publications, authors, journals, or keywords based on data from databases such as Scopus, Web of Science, and others (Eck & Waltman, 2010). The results of VOSviewer from the research study are as follows.

Figure 2. Network Visualization VOSviewer

Figure 2 shows four different color clusters that represent research trends related to audio-visual media in elementary education. The purple cluster indicates that audio-visual media is frequently used in experimental studies, particularly posttest designs and classroom action research employing the Kemmis model, with a primary focus on improving student learning outcomes. The green cluster highlights a strong connection between students and correlation coefficients, suggesting that most studies adopt a quantitative approach to measure learning outcomes statistically. Meanwhile, the yellow cluster reflects a dominant focus on the application of the Problem-Based Learning (PBL) model at the elementary school level, where audio-visual media is evaluated mainly for its short-term effectiveness in classroom implementation. The red cluster further emphasizes the prevalence of experimental research designs conducted in elementary schools.

Overall, this visualization confirms that audio-visual media is a well- established research topic, particularly within PBL-based learning and experimental frameworks. However, the concentration of studies on short-term learning outcomes, posttest results, and correlation analyses reveals a research gap. Few studies explore the integration of audio-visual media with alternative pedagogical models such as Contextual Teaching and Learning (CTL) or digital literacy-based instruction. In addition, limited attention has been given to longitudinal impacts, such as sustained learning motivation, engagement, or conceptual retention over time. Therefore, future research has the opportunity to contribute novelty by examining audio-visual media integrated with specific learning models and by analyzing its long- term effects on students' motivation and learning behaviors, particularly at the elementary school level.

CONCLUSION

Based on the results of a review of various research articles published between 2020 and 2025, it can be concluded that the development of audio-visual media makes a significant contribution to improving elementary school students' learning outcomes. The developed media generally take the form of instructional videos, interactive animations, and educational short films that are designed in accordance with the characteristics, cognitive development, and learning needs of elementary school students. In terms of development procedures, most studies adopt instructional design models such as ADDIE and Borg & Gall, as these models provide systematic, structured, and iterative stages that are well suited to the development of audio-visual learning media.

The ADDIE model is widely used due to its simplicity and flexibility, allowing developers to analyze learners' needs, design appropriate content, and evaluate media effectiveness efficiently. Meanwhile, the Borg & Gall model is preferred for its emphasis on product validation and field testing, ensuring that the developed media are pedagogically valid, practical, and effective before broader implementation. The findings of the reviewed studies consistently indicate that the use of audio-visual media enhances students' learning outcomes, not only in terms of achievement scores but also in learning engagement and conceptual understanding. Audio-visual media are able to present learning materials in a more concrete, contextual, and meaningful manner, thereby supporting active and enjoyable learning experiences in elementary schools. Therefore, audio-visual media function not merely as instructional aids, but as strategic tools for fostering innovative and effective learning environments. For future research, it is recommended that the development of audio-visual media be integrated with innovative instructional approaches, such as project-based learning, differentiated instruction, and digital

literacy-based learning, to better accommodate diverse student needs and 21st-century learning demands. In addition, future studies may explore the long-term impact of audio-visual media on students' motivation, creativity, and higher-order thinking skills. Strengthening collaboration among teachers, media developers, and educational institutions is also essential to ensure the sustainable development and optimal utilization of audio-visual media in elementary education.

REFERENCES

Anggraini, A., Wibowo, E. W., & Mastoah, I. (2024). Pengembangan Media Audio Visual Powtoon untuk Meningkatkan Hasil Belajar Siswa pada Materi Skala Kelas V SD. *Jurnal Pengajaran Sekolah Dasar*, 3(1), 53–65. https://doi.org/10.56855/jpsd.v3i1.1068

Akhmadan, F. (2017). *Pemanfaatan Sumber Belajar Berbasis Teknologi dalam Proses Pembelajaran.* Yogyakarta: Deepublish.

Ariati, C., & Juandi, D. (2022). *Kemampuan Penalaran Matematis: Systematic Literature Review*. LEMMA: *Letters of Mathematics Education*, 8(2), 61–75. https://doi.org/10.22202/jl.2022.v8i2.5745

Arsyad, A. (2015). *Media pembelajaran*. Jakarta: Rajawali Pers.

Benny, A.P. (2017). *Media & Teknologi Dalam Pembelajaran.* Jakarta: Kencana Prenada Media Group.

Dewi, S. Z., & Hilman, I. (2019). Penggunaan TIK sebagai Sumber dan Media Pembelajaran Inovatif di Sekolah Dasar. *Indonesian Journal of Primary Education*, 2(2), 48. https://doi.org/10.17509/ijpe.v2i2.15100

Fricticarani, A., Hayati, A., R, R., Hoirunisa, I., & Rosdalina, G. M. (2023). Strategi Pendidikan Untuk Sukses di Era Teknologi 5.0. Jurnal Inovasi Pendidikan Dan Teknologi Informasi (JIPTI), 4(1), 56–68. https://doi.org/10.52060/pti.v4i1.1173

Hamalik, O. (2011). *Proses belajar mengajar*. Jakarta: Bumi Aksara.

Heinich, R., Molenda, M., Russell, J. D., & Smaldino, S. E. (2002). *Instructional Media and Technologies for Learning (7th ed.).* Upper Saddle River, NJ: Merrill/Prentice Hall.

Janati, W.R., Ayu R., & Dwi W. (2023). Pengembangan Media Audio Visual pada Pembelajaran Tematik untuk Meningkatkan Hasil Belajar Siswa. *Journal of Learning and Educational Studies*. Volume 1, Issue 1, 2023 pp. 9-19. www.jurnal.piramidaakademi.com/index.php/ijles

Lubis, H. Z. & N. I. (2020). Pengembangan Bahan Ajar Akuntansi Untuk Meningkatkan Kualitas Pembelajaran Di Kelas. 3(3). https://doi.org/10.30596/liabilities.v3i3.6173.

Marhaini, Muhammad Ali, & Baiq R.N. (2025). Pengembangan Media Pembelajaran Audio Visual Untuk Meningkatkan Hasil Belajar Pada Mata Pelajaran IPAS. *Jurnal Ilmu Kependidikan.* Vol. 20, No 1 April 2025, hal. 99-113. http://e-journal.hamzanwadi.ac.id/index.php/edc

Moshinsky, M. (1959). Pengaruh Teknologi terhadap Pendidikan di Abad 21. Nucl. Phys., 13(1), 104–116.

Mustadi, A., & Latifah, N. (2019). Pengembangan media audio visual berbasis karakter untuk pembelajaran PPKn di sekolah dasar. *Jurnal Inovasi Pendidikan Dasar*, 5(2), 120–128. https://doi.org/10.21831/jpipfip.v0i0.4614

Nasution, A. J., Ziliwu, S., Akhiriani, W., & Waina, A. (2023). Penguatan Moral Melalui Pembelajaran PPKN di MIS Al-Afkari Kabupaten Deli Serdang. EduInovasi: Journal of Basic Educational Studies, 3(1), 151–159. https://doi.org/10.47467/edui.v3i1.3156

Pamungkas, W. A. D., & Koeswanti, H. D. (2022). Penggunaan Media Pembelajaran Video Terhadap Hasil Belajar Siswa Sekolah Dasar. Jurnal Ilmiah Pendidikan Profesi Guru, 4(3), 346–354. https://doi.org/10.23887/jippg.v4i3.41223

Purnaningsih, P. (2017). Strategi Pemanfaatan Media Audio Visual untuk Peningkatan Hasil Belajar Bahasa Inggris. Jurnal Informatika Universitas Pamulang, 2(1), 34 https://doi.org/10.32493/informatika.v2i1.1503

Sadiman, A. S., Rahardjo, R., Haryono, A., & Rahardjito. (2010). *Media pendidikan: Pengertian, pengembangan dan pemanfaatannya.* Jakarta: Raja Grafindo Persada.

Sari, N. A., & Margono. (2020). Pengaruh media video pembelajaran terhadap hasil belajar IPA siswa SD. *Jurnal Pendidikan Dasar Nusantara*, 5(1), 45–52.

Sarwendah, R. E. N., Putri, K. E., & Hunaifi, A. A. (2023). Pengembangan Multimedia Berbasis Macromedia Flash Pada Materi Sistem Tata Surya Untuk Siswa Sekolah Dasar. *Jurnal Inovasi Pendidikan Dan Teknologi Informasi (JIPTI)*, *4*(1), 1–8. https://doi.org/10.52060/pti.v4i1.1168

Setiawati, E., Moh Irawan Z., & Aisa, N.R. (2024). Pengembangan Media Pembelajaran Audio Visual Untuk Meningkatkan Hasil Belajar Siswa Kelas IV Pada Muatan IPAS SDN Gugus I Sekarbela. *Jurnal Ilmiah Profesi Pendidikan*. 9 (4): 2448 – 2456. https://doi.org/10.29303/jipp.v9i4.2826

Sole, F. B., & Anggraeni, D, M. (2018). Inovasi Pembelajaran Elektronik dan Tantangan Guru Abad 21. *Journal Penelitian dan Pengkajian Ilmu Pendidikan: E-Saintika*, 2(1), 10-18.

Subhan, M., Yulia D., & Eci S. (2025). Pengembangan Media Audio Visual Untuk Meningkatkan Hasil Belajar Siswa Pada Pembelajaran Pendidikan Pancasila Menggunakan Aplikasi Capcut. *Jurnal Inovasi Pendidikan dan Teknologi Informasi*. Volume 6 No. 1, April. http://ejournal.ummba.ac.id/index.php/JIPTI/

Sudjana, N. (2009). *Penilaian Hasil Proses Belajar Mengajar*. Bandung: Remaja Rosdakarya

Suparno, P. (2011). *Teori konstruktivistik Jean Piaget*. Yogyakarta: Kanisius.

Sugiyanto. (2009). *Metode pembelajaran inovatif*. Surakarta: UNS Press.

Tafonao, T. (2018). Peranan Media Pembelajaran Dalam Meningkatkan Minat Belajar Mahasiswa. *Jurnal Komunikasi Pendidikan,* 2(2), 103. https://doi.org/10.32585/jkp.v2i2.113

Tahajudin, D., Maulina R., & Fauzi F. (2023). Pengembangan Media Audio Visual Untuk Meningkatkan Hasil Belajar Ips Pada Materi Ips Kelas V Sekolah Dasar. *Jurnal Amal Insani*. e-ISSN: 2963-8275. http://jurnal.amalinsani.org/index.php/sehran

Triyadi, S. (2015). Efektivitas Penggunaan Media Audio-Visual Untuk Meningkatkan Keterampilan Menyimak Siswa Pada Mata Pelajaran Pendidikan Bahasa Indonesia. *Jurnal Pendidikan Unsika*, 3(2), 188–199. https://doi.org/10.35706/judika.v3i2.215

Van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics,* 84(2), 523–538. https://doi.org/10.1007/s11192-009-0146-3