Jurnal Cakrawala Pendas
Vol. 11 No. 3, July 2025
DOI: http://dx.doi.org/10.31949/jcp.v11i3.13478

p-ISSN: 2442-7470
e-ISSN: 2579-4442

FLIPBOOK LEARNING MEDIA ON IPAS LEARNING OUTCOMES IN ELEMENTARY SCHOOL STUDENTS

Elma Maylisa Wahyu Salsabila[1*], Suryanti[2], Wahono Widodo[3], Ganes Gunansyah[4], Ari Metalin Ika Puspita[5]

[1,2,3,4,5]Universitas Negeri Surabaya
[1]24010855002@mhs.unesa.ac.id

Abstract
This study aims to analyze the effect of Flipbook as a learning medium on elementary school students' Ilmu Pengetahuan Alam dan Sosial (IPAS) learning outcomes through a literature review. Flipbook is an interactive digital learning medium that enhances students' engagement and understanding of the subject matter. This research employs a literature review method by analyzing previous studies discussing Flipbook effectiveness in learning. The findings indicate that Flipbook positively impacts students' learning outcomes, as evidenced by increased pretest and posttest scores. Additionally, Flipbook supports various learning models such as Jigsaw and Problem-Based Learning (PBL), improving learning effectiveness. The analysis also reveals that Flipbook significantly enhances students' learning interest, conceptual understanding, and academic achievement. Therefore, the use of Flipbook as a learning medium in elementary schools is highly recommended to foster more interactive and effective learning.
Keywords: *Flipbook; Learning Media; Learning Outcomes; IPAS; Elementary School*

Abstrak
Penelitian ini bertujuan untuk menganalisis pengaruh penggunaan media pembelajaran Flipbook terhadap hasil belajar Ilmu Pengetahuan Alam dan Sosial (IPAS) pada siswa sekolah dasar melalui tinjauan literatur. Flipbook merupakan media pembelajaran digital interaktif yang dapat meningkatkan keterlibatan dan pemahaman siswa terhadap materi pelajaran. Penelitian ini menggunakan metode kajian literatur dengan menganalisis berbagai penelitian terdahulu yang membahas efektivitas Flipbook dalam pembelajaran. Hasil kajian menunjukkan bahwa penggunaan Flipbook berdampak positif terhadap hasil belajar siswa, yang ditunjukkan dengan peningkatan nilai pretest dan posttest. Selain itu, Flipbook mendukung berbagai model pembelajaran seperti Jigsaw dan Problem-Based Learning (PBL), sehingga meningkatkan efektivitas pembelajaran. Analisis juga menunjukkan bahwa Flipbook dapat meningkatkan minat belajar, pemahaman konsep, serta hasil belajar siswa secara signifikan. Dengan demikian, penggunaan Flipbook sebagai media pembelajaran di sekolah dasar sangat direkomendasikan untuk menciptakan pembelajaran yang lebih interaktif dan efektif.
Kata Kunci: Flipbook; Media Pembelajaran; Hasil Belajar; IPAS; Sekolah Dasar

Received	: 2025-04-12	Approved	: 2025-07-10
Reviesed	: 2025-06-26	Published	: 2025-07-31

Introduction

Education in the digital era is currently undergoing a significant transformation with the use of technology as a medium to support learning. One form of learning media innovation that is developing is *flipbook* media that combines visual and interactive elements in the teaching and learning process. *Flipbook* learning media is a development from a conventional book to a digital book that can contain multimedia content such as text, images, audio, video, and animation in an attractive format (Febrianti, 2021). The use of *flipbook* media has become an alternative solution in improving the quality of learning in the midst of increasingly complex educational

challenges. Technology-based learning media can increase students' motivation and interest in the material learned (Solihin et al., 2024). This is the basis for the importance of developing innovative learning media, especially in science subjects that require conceptual visualization to facilitate student understanding.

Natural and Social Sciences (IPAS) is a subject that has interdisciplinary characteristics, with a wide and complex scope of material. Understanding the concept of IPAS requires students' ability to integrate various disciplines, such as physics, biology, chemistry, geography, and social sciences (Julianti et al., 2024). The complexity of IPAS material is often a challenge for elementary school students who are at the stage of concrete operational cognitive development. At this stage, students need learning media that can concretize abstract concepts in IPAS to facilitate understanding (Srirahmawati et al., 2024). Flipbook *learning media* with its advantages of visualization and interactivity has the potential to bridge the gap between abstract and concrete concepts in IPAS learning. The use of appropriate learning media has been shown to have a positive correlation with improving student learning outcomes as revealed by Tarofil et al. (2024) that interactive learning media contributes to creating meaningful learning experiences.

Learning outcomes are one of the indicators of the success of the learning process which includes cognitive, affective, and psychomotor aspects. According to aspects include the ability to remember, understand, apply, analyze, evaluate, and create. The low learning outcomes of IPAS are suspected to be related to the learning process that is still conventional and does not utilize learning media that is in accordance with the characteristics of the material and student development (Sukaetin et al., 2022). According to Lestyono et al. (2024), it was revealed that the selection of the right learning media can increase the effectiveness of material delivery, which has implications for improving learning outcomes. Therefore, the development and implementation of *flipbook learning media* is an alternative solution that needs to be studied more deeply.

The development of digital technology has changed the learning paradigm from teacher-centered to student-centered which empowers students as learning subjects. *Flipbook learning media* with its interactive characteristics is in line with the principles of active, innovative, creative, effective, and fun learning (PAIKEM) proclaimed in the Independent Curriculum. Research by Maghfiroh et al. (2024) shows that the application of technology-based learning media is able to create a more dynamic learning environment and increase students' active participation in the learning process. The learning approach by utilizing *flipbook media* also has the potential to develop 21st century skills such as critical thinking, creativity, collaboration, and communication which are essential in facing global challenges (Sipuan et al., 2022). The integration of technology in science learning not only improves understanding of concepts but also prepares students to face the era of technological disruption that requires high adaptability.

Although various studies have been conducted regarding the implementation of technology-based learning media, a comprehensive study on the effectiveness of flipbook media on Natural and Social Sciences (IPAS) learning outcomes in elementary schools is still limited. Most prior studies have focused on the development of flipbook media in isolation—targeting specific subjects such as science or social studies—without exploring its integrative function in interdisciplinary IPAS learning. Furthermore, existing literature often emphasizes product development or media feasibility, rather than systematically evaluating its impact on students' cognitive outcomes. The novelty of this study lies in its analytical approach through a literature review to evaluate how flipbook media specifically affects integrated IPAS learning outcomes

in elementary education. This research does not merely assess the use of Flipbook as a digital tool, but highlights its capability to support interdisciplinary content delivery, enhance conceptual visualization, and improve critical understanding in line with elementary students' developmental stages. Additionally, this study synthesizes how Flipbook media can be effectively integrated with active learning models—such as Jigsaw and Problem-Based Learning (PBL)—which has not been the central focus in most previous studies. Therefore, the added value of this research is the provision of a more holistic perspective on the pedagogical benefits of Flipbook for improving IPAS learning effectiveness, making it a relevant and innovative contribution to the field of primary education (Widodo et al., 2023). Hajar's research (2024) found that the effectiveness of learning media is greatly influenced by the context of implementation, student characteristics, and media integration strategies in the learning process. Therefore, a comprehensive and systematic literature review on the influence of *flipbook learning media* on social studies learning outcomes in elementary school students is important to provide a scientific basis for the development and implementation of more effective learning media.

Flipbook *learning media* as one of the innovations in the world of education has great potential in facilitating meaningful learning in elementary school students. In line with the research interactive learning media can facilitate students in constructing their own knowledge through interaction with a learning environment rich in stimulus. The use of *flipbook* media in IPAS learning allows students to explore learning content at their own pace and repeat parts that are not yet understood. This is in line with the principles of adaptive learning that emphasize the importance of personalizing learning according to the needs and characteristics of students (Al Fadillah & Akbar, 2024). The use of *flipbook* learning media also has the potential to create a more authentic and contextual learning experience, so that the material learned is not only memorized but also meaningful for students' daily lives.

Research Methods

This study uses a systematic literature review approach by adopting the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) protocol to ensure that the literature review process is carried out in a systematic, transparent, and replicable manner. The initial stage of the research began by formulating the research questions that became the focus of the study, namely: *"How does flipbook learning media affect the learning outcomes of Natural and Social Sciences (IPAS) in elementary school students?"*. After the research questions were formulated, the researcher conducted a literature search on five credible electronic databases, namely Google Scholar, ScienceDirect, ERIC, Scopus, and Garuda (Garba Reference Digital). The search was conducted using a combination of relevant keywords, such as: "flipbook media", "science learning", "learning outcomes", and "elementary school" in English and Indonesian.

Furthermore, an article selection process is carried out based on inclusion and exclusion criteria. Inclusion criteria include: (1) scientific articles published between 2020 and 2024; (2) articles that discuss the influence of flipbook media on learning outcomes; (3) the research subjects are elementary school students; (4) focus on the subject of science or science and social studies components; and (5) articles are available in Indonesian or English. Meanwhile, the exclusion criteria include: (1) articles in the form of books, theses, theses, or dissertations; (2) articles that cannot be accessed in full text; and (3) articles that do not explicitly mention research methods.

After the articles are collected, the next stage is a screening process based on the title, abstract, and overall content of the article to ensure that the selected article really meets the criteria that have been determined. Articles that passed the selection were then extracted data by recording important information from each article. The data collected includes: (1) the

identity of the article such as the author's name, year of publication, and title; (2) the research design used (e.g. experiments, quasi-experiments, qualitative studies); (3) characteristics of the research subject (number, class level, location); (4) the type of flipbook media used (manual or application-based); (5) the IPAS material taught; (6) instruments used to measure learning outcomes; (7) data analysis techniques; and (8) the main findings of the study.

The final stage of this method is data analysis that is carried out thematically to identify patterns, trends, and similarities of findings between studies related to the influence of flipbook media on IPAS learning outcomes. The findings are synthesized narratively with the support of tables and diagrams that present a summary of the data and make it easier for readers to understand the general trends in the studies analyzed. Through this approach, it is hoped that a deep and comprehensive understanding of the effectiveness of flipbook media in IPAS learning in elementary schools will be obtained.

Table 1. Article Selection Process with the PRISMA Method

Selection Stages	Number of Articles
Identification	
Records identified through database searching	245
Screening	
Records after duplicates removed	187
Records screened (title and abstract)	187
Records excluded	110
Eligibility	
Full-text articles assessed for eligibility	77
Full-text articles excluded with reasons:	59
- Irrelevant to the research topic	32
- The research subject is not an elementary school student	14
- Not focusing on social studies subjects	13
Included	
Studies included in literature review	18

Based on the selection process using the PRISMA method, out of 245 articles that were initially identified, 18 articles were obtained that met the criteria for further analysis. The PRISMA diagram shows a systematic selection flow starting from identification, screening, eligibility determination, to inclusion of final articles. There are 11 main indicators that will be used to analyze these articles, including methodological aspects, characteristics of *flipbook* media, implementation in learning, and their impact on IPAS learning outcomes in elementary school students. A comprehensive analysis of these indicators will provide a clear picture of the effectiveness of *flipbook* learning media in improving IPAS learning outcomes.

Table 2. Indicator Criteria Analyzed in a Literature Review

Analysis Indicators	Description
Research Design	The type of research design used (experimental, quasi-experimental, PTK, R&D, etc.)
Characteristics of Research Subjects	Number of subjects, grade level, demographic characteristics of students
Types of Flipbook Media	Platform/software used to create *flipbooks*, integrated multimedia features (text, images, audio, video, animation)
Materials/Topics of IPAS	IPAS topics/materials that are used as the focus in learning with *flipbook media*
Implementation Method	How to use *flipbook* media in learning (individual/group, duration, frequency, etc.)

Learning Outcome Measurement Instrument	The type of instrument used to measure learning outcomes (multiple-choice tests, essays, observations, portfolios, etc.)
Learning Outcome Aspects	Aspects of measured learning outcomes (cognitive, affective, psychomotor)
Statistical Effects	Statistical values that show the significance of the influence of *flipbook* media on learning outcomes (effect size, p-value, gain score, etc.)
Supporting Factors	Factors that support the successful implementation of *flipbook* media in IPAS learning
Inhibiting Factors	Factors that hinder the implementation of *flipbook media* in social studies learning
Additional Findings	Other important findings related to the influence *of flipbook* media on variables other than learning outcomes

Results and Discussion

The results of this study present a characteristic analysis of various studies that discuss the use of flipbook media in learning. The analysis was carried out to understand important aspects related to the application of flipbooks, such as the purpose of use, the learning methods used, the impact on learning outcomes, and the advantages and challenges in its use. Table 3 summarizes the main findings of these studies.

Table 3. The results of characteristic analysis of studies related to the use of *flipbook* media in learning

No	Author & Year	Type of Research	Research Subjects	Analysis Method	Main Findings
1	(Awaludin & Yulianto, 2024)	Experimental	57 fourth-grade elementary students	Inferential statistical analysis	The use of flipbook media significantly improves fourth-grade students' IPAS learning outcomes.
2	(Aziz et al., 2024)	R&D (3D Model)	Third-grade elementary students	Expert validation, small- and large-scale trials	The digital flipbook of the Legend of Kemarau Island is highly valid and practical for social studies learning.
3	(Preti, 2024)	Quasi-Experimental	Fifth-grade elementary students	Normality test, homogeneity test, independent sample t-test	The PBL model assisted by a flipbook greatly influences IPAS learning outcomes.
4	(Taufik & Prasetyaningtyas, 2024)	R&D (ADDIE)	28 fifth-grade elementary students	Expert validation test, t-test, n-gain	The E-MAS flipbook is effective in improving IPAS learning outcomes on community economic activities.
5	(Huwaidi & Ansori, 2024)	R&D	19 fifth-grade elementary students	Pretest-posttest	The PBL-based flipbook is very feasible and effective in social studies learning.
6	(Saputra et al., 2024)	Pre-Experimental	21 fourth-grade elementary students	Pretest-posttest	The flipbook significantly improves the understanding of plant reproduction concepts.

7	(Mulyani, 2024)	R&D (ADDIE)	Fourth-grade elementary students	Expert validation, t-test, n-gain	The web-based interactive flipbook is effective in improving learning outcomes on force material.
8	(Sari & Isdaryani, 2024)	Experimental	Fourth-grade elementary students	Paired sample t-test, N-gain	The flipbook-based e-module with the PjBL model is quite effective in improving IPAS learning outcomes.
9	(Edray et al., 2024)	Classroom Action Research (CAR)	Fifth-grade elementary students	Qualitative and quantitative methods	The flipbook gradually improves cognitive learning outcomes in Pancasila Education.
10	(Nurwidiyanti & Sari, 2022)	R&D (ADDIE)	27 fourth-grade elementary students	Expert validation, trials	The science literacy-based flipbook is highly feasible and improves students' science literacy.
11	(Amalia et al., 2023)	R&D	Fifth-grade elementary students	Normality test, t-test, n-gain	The flipbook is highly feasible (98.44%) and effective (sig=0.000) in improving social studies learning outcomes.
12	(Arisandhi et al., 2023)	R&D (ADDIE)	39 fourth-grade elementary students	Expert validation, small- and large-scale trials	The interactive flipbook is highly valid and feasible, improving students' cognitive achievement in science.
13	(Masithoh, 2022)	Experimental	10 fifth-grade elementary students	t-test, descriptive analysis	The Jigsaw model assisted by a flipbook significantly affects social studies learning outcomes.
14	(Juliani & Ibrahim, 2023)	Quasi-Experimental	60 fourth-grade elementary students	Homogeneity test, t-test	The flipbook affects Indonesian language learning outcomes of fourth-grade students.
15	(Nirmala & ISTIANAH, 2020)	R&D (Borg & Gall)	10 fourth-grade elementary students	Expert validation, teacher and student questionnaires	The flipbook is very valid (97.6%) and practical for science learning on metamorphosis material.
16	(Nuryani & Abadi, 2021)	R&D (ADDIE)	Fifth-grade elementary students	Expert validation, field trials	The human respiratory system flipbook is highly feasible for science learning.

17	(Mujiatun et al., 2023)	Descriptive Qualitative	Fifth-grade elementary students	Learning needs analysis	The flipbook can optimize science understanding with the PBL model and SETS approach.
18	(Amalia et al., 2023)	R&D (Borg & Gall)	34 fifth-grade elementary students	Pretest-posttest, effectiveness test	The electronic-based flipbook is effective in improving science learning outcomes for fifth-grade students.

Table 3 shows that most studies related to the use of flipbooks in elementary school learning have diverse characteristics but tend to consistently show positive results. These studies used various design approaches, such as experiments, quasi-experiments, research and development (R&D), pre-experiments, and classroom action research. The research subjects were generally fourth and fifth grade elementary school students, with the number of respondents varying between 10 and 60. The data analysis techniques used also varied, ranging from inferential statistics such as t-tests and N-Gain to expert validation and descriptive analysis. The majority of studies concluded that flipbooks can improve student learning outcomes, both in terms of conceptual understanding, learning motivation, and student engagement. This indicates that flipbooks are an effective alternative learning medium and are suited to the needs of 21st-century learning.

Table 4. Research Design Analysis

Yes	Analysis Indicators	Description
1	Research Design	The research uses Research and Development (R&D) methods with ADDIE and Borg & Gall models. Some studies also use quasi-experiments.

Table 4 presents the results of the analysis of the research designs used in studies related to flipbook media. The majority of studies used a Research and Development (R&D) approach, with the most common models being the ADDIE and Borg & Gall models. These models are known to be systematic because they encompass the stages of analysis, design, development, implementation, and evaluation. Several studies also combined R&D with experimental methods to measure the media's effectiveness through field trials. This approach enabled researchers to develop valid and practical flipbook media based on expert validation results and student responses. By using robust designs, these studies produced reliable findings regarding the effectiveness of flipbooks as a learning medium.

Table 5. Characteristics of Research Subjects

Yes	Characteristics	Description
1	Number of Subjects	10 to 60 students in grades IV-V SD in various primary schools
2	Class Level	Classes IV and V
3	Demographic Characteristics	Come from a variety of schools with diverse backgrounds

Table 5 describes the characteristics of the research subjects used in studies related to flipbook media. The research subjects were primarily fourth and fifth grade elementary school students, with the number of participants varying depending on the type and scope of the study. Some studies involved a single class, while others compared two groups (control and experimental). Students came from various school backgrounds, both public and private, and from both urban and rural areas. This diversity suggests that the use of flipbook media can be

widely applied across various elementary education contexts. This inclusive subject characteristic increases the generalizability of the research results.

Table 6. Types of Flipbook Media

Yes	Indicator	Description
1	Platform/Software	Flip PDF, Canva, and *other* flipbook development software
2	Multimedia Features	Text, images, audio, video, animation

Table 6 outlines the types of flipbook media used in these studies. Digital platforms such as Flip PDF and Canva are often used to create interactive flipbooks. These media are equipped with integrated multimedia elements such as text, images, animation, audio, and video. The presence of these multimedia features allows students to have a more engaging and interactive learning experience. Furthermore, flipbooks can be accessed via computers or tablets, making them flexible for use in various learning situations. This demonstrates that flipbooks function not only as reading media but also as learning aids that can adapt to developments in educational technology.

Table 7. Material/Topics

Yes	Material/Topics	Information
1	Science - Life Cycle of Living Beings	Basic biology material for grade IV
2	IPA - Metamorphosis	Material on animal shape change
3	Science - Respiratory System	Material on the human respiratory organs
4	Social Studies - Geography and History	Concept of territory and historical events
5	Indonesian - Fiction Text	Understanding the text of fictional stories

Table 7 illustrates the material or topics presented in flipbooks in each study. The most frequently used material was in the Natural and Social Sciences (IPAS) subject, specifically regarding the life cycle of living things, metamorphosis, and the human respiratory system. Furthermore, several studies also used flipbooks in Indonesian language learning, such as in understanding narrative texts and folktales. This demonstrates the flexibility of flipbooks and their application to various subjects. Presenting material in a visual and interactive format helps students grasp abstract concepts more concretely. Thus, flipbooks have the potential to support understanding across subject areas.

Table 8. Implementation Method

Yes	Indicator	Description
1	Use	Groups and individuals
2	Duration	2-4 weeks per material
3	Frequency	2-3 times per week

Table 8 describes the implementation methods for flipbooks in learning. Flipbooks are used in various formats, both individually and in groups, depending on the learning objectives and design. The duration of flipbook use typically ranges from two to four sessions, with a frequency of use 2–3 times per week. This media is implemented as part of active learning activities that involve independent and collaborative exploration of the material. In several studies, teachers also act as facilitators, assisting with the use of the media. This flexible implementation model demonstrates that flipbooks can be adapted to class needs. As a result, students are more focused and actively engaged in the learning process.

Table 9. Learning Outcome Measurement Instrument

Yes	Instrument Type	Description
1	Multiple-choice test	Used to measure cognitive aspects
2	Essay	Testing understanding deeper
3	Observation	Measuring students' skills during learning

Table 9 shows the types of instruments used to measure student learning outcomes after using flipbooks. The most common instrument was multiple-choice questions to measure students' cognitive aspects. Some studies also included essay questions to gain in-depth conceptual understanding. Additionally, observations and questionnaires were used to assess students' responses to media use and their learning behavior. Expert validation instruments were also used to assess the quality of the developed media. The use of these various instruments provided more holistic data regarding the influence of flipbooks on learning outcomes. This combination of quantitative and qualitative approaches enhanced the validity of the research findings.

Table 10. Learning Outcome Aspects

Yes	Aspects	Description
1	Cognitive	Understanding concepts and knowledge
2	Affective	Interest and motivation to learn
3	Psychomotor	Skills in media use

Table 10 reviews the learning outcomes measured in these studies. The three main aspects of focus are cognitive, affective, and psychomotor. The cognitive aspect encompasses improved conceptual understanding, factual knowledge, and critical thinking skills. The affective aspect encompasses increased interest, motivation to learn, and a positive attitude toward the material. Meanwhile, the psychomotor aspect is evident in students' ability to operate digital media and successfully complete learning tasks. By measuring these three aspects, the study shows that flipbooks impact not only knowledge but also student attitudes and skills. This aligns with the goal of holistic learning, which emphasizes the development of students' full potential.

Table 11. Statistical Effects

Yes	Indicator	Value
1	Media Validation Percentage	90%-100% (very decent category)
2	Material Validation Percentage	87%-100% (highly eligible category)
3	N-Gain Value	0.65 (medium category)
4	P-value	0.000 (mean significant)

Table 11 presents the statistical impact of flipbook media use on learning outcomes. Media validation results showed very high scores, ranging from 90% to 100%, indicating that the media is suitable for use. Material validation also showed scores between 87% and 100%, indicating that the content quality is in line with the curriculum. The average N-Gain value of 0.65 indicates a moderate increase in learning. Furthermore, most studies obtained a significance value (p) of less than 0.05, even up to $p = 0.000$, indicating a significant impact of flipbook use on student learning outcomes. These findings strengthen the evidence that flipbook media is effective in improving learning outcomes. This effectiveness makes flipbooks a potential medium for widespread integration into basic learning.

Table 12. Supporting Factors

Yes	Factor	Description
1	Teacher Support	Teachers strongly support the use of *flipbooks*
2	Student Interests	Students are more interested in learning with interactive media

Table 12 outlines the factors supporting the successful implementation of flipbook media. One key factor is teacher support, which provides guidance and motivation to students during the media's use. Students' readiness and enthusiasm for technology also contribute to the learning process. Attractive and interactive media designs make it easier for students to understand the material. Furthermore, parental involvement in supporting students' learning at home also contributes to the media's effectiveness. A conducive learning environment and supporting facilities, such as digital devices, are other important elements. All of these factors create a synergy that supports the successful use of flipbook media in the learning process.

Table 13. Inhibiting Factors

Yes	Factor	Description
1	Access Technology	Not all schools have adequate devices
2	Internet Limitations	Some areas have poor internet connections

Table 13 identifies various inhibiting factors in the implementation of flipbook media in elementary schools. Some schools experience limited facilities and infrastructure, such as the lack of computers, tablets, or a stable internet connection. This is a major obstacle to optimally accessing and operating flipbook media. Furthermore, not all teachers have sufficient technological skills to support the integration of digital media into learning. Technical difficulties also arise for students who are not yet accustomed to using digital devices. Lack of time for planning and implementation is also a challenge. These factors highlight the need for teacher training and improving school infrastructure to support technology-based learning.

Table 14. Additional Findings

Yes	Findings	Description
1	Improving Science Literacy	Students are better able to understand scientific phenomena
2	Increased Motivation to Learn	Students are more enthusiastic in participating in learning

Table 14 contains additional findings from studies related to the use of flipbooks. Several studies have noted that flipbooks not only improve learning outcomes but also enhance students' scientific literacy. Students become more active in asking questions, discussing, and exploring learning materials independently. The use of flipbooks also stimulates students' intrinsic motivation because the medium is perceived as fun and easy to use. Furthermore, the visualizations in flipbooks help students understand abstract concepts more concretely. Some students also demonstrated improved digital skills during the learning process. Overall, flipbooks serve not only as a learning medium but also as a tool that enriches students' overall learning experience.

Learning media has an important role in improving student learning outcomes. One of the media that is growing rapidly in the digital era is *flipbooks*, which offer various advantages in presenting material in a more interactive manner. *Flipbooks* integrate text, images, animations, and sounds so that they can increase student involvement in the learning process (Nuryani & Abadi, 2021). The ease of access and flexibility in its use make *flipbooks* an effective alternative learning media for Natural and Social Sciences (IPAS) subjects in elementary schools. Several studies show that *flipbooks* have been shown to improve student learning outcomes in a variety of subjects, including social studies. For example, research conducted by Amalia et al. (2023) showed that the use of *flipbook* media in social studies learning in class V of SDN Gajahmungkur 02 Semarang resulted in a significant increase in learning outcomes with an average increase of

0.65 in the n-gain test. This proves that *flipbooks* can help students understand abstract concepts in IPAS more easily.

The main advantage of *flipbooks* lies in their interactive capabilities that can improve students' cognition. Arisandhi et al. (2023) developed flipbook interactive learning media to improve students' understanding of science material in grade IV elementary school. The results of their study showed that *flipbooks* have an excellent validity rate with an average score of above 90%. This indicates that *flipbook media* is not only interesting for students but also effective in improving understanding of concepts in IPAS. In addition, collaborative learning models such as jigsaws combined with *flipbook* media also contribute to improving student learning outcomes. Masithoh (2022) found that the application of a flipbook-assisted jigsaw learning model in social studies learning in grade V elementary school in Sidorejo Village significantly improved student learning outcomes. With an average pretest score of 71.3 increasing to 87 in the posttest, this shows that *flipbooks* are able to increase the effectiveness of discussion-based learning and cooperation.

The use of *flipbooks* in language learning also showed positive results. Juliani & Ibrahim (2023) examined the influence *of flipbooks* in Indonesian learning in grade IV elementary school and found that there was a significant increase in learning outcomes. With quasi-experimental methods and t-tests, a significant value of 0.000 was obtained which showed that *flipbooks* had a positive impact on students' ability to read and understand the text of the story. The development of *flipbook* media as a science learning tool also shows its effectiveness in increasing students' understanding of scientific concepts. Nirmala & ISTIANAH (2020) developed a *flipbook* for metamorphosis material in grade IV elementary school and found that the validity of the media reached 97.6%, the validity of the material reached 87%, and the response of students and teachers reached 91%. This data shows that *flipbooks* are a very valid and practical learning medium in improving students' understanding of science concepts.

One of the factors that makes *flipbooks* effective is their ability to present material visually and multimodally. Nuryani & Abadi (2021) developed *a flipbook* for human respiratory system material in grade V elementary school students and found that the learning content aspect obtained a validity score of 98%, learning media 93%, and learning design 92.5%. This research shows that students are more interested and easier to understand the material with the help *of flipbooks* compared to conventional learning methods. An analysis of the need for the use of *flipbooks* in science learning has also been researched by Mujiatun et al. (2023), showing that the selection of appropriate learning media, including *flipbooks*, can increase learning effectiveness. *Flipbook* allows the application of a Problem-Based Learning (PBL)-based learning model with a Science, Environment, Technology, and Society (SETS) approach to help students understand the concept of IPAS in a more contextual way.

Another study by Amalia et al. (2023) also confirms that flipbook-based electronic teaching materials can improve science learning outcomes in elementary school students. With a study population of 34 students and an effectiveness analysis using the t-test, the results showed that *flipbooks* were able to improve student learning outcomes with an n-gain of 0.658, which falls into the category of moderate improvement. This proves that *flipbook* media is suitable for use in IPAS learning. Based on these various studies, it can be concluded that the use of *flipbooks* in social studies learning in elementary schools has a positive impact on student learning outcomes. The *flipbook*'s advantages in presenting material in an interactive, multimodal, and flexible manner make it an effective medium in helping students understand the concept of IPAS better. Therefore, the use of flipbook-based learning media needs to be

further developed and integrated in the learning process in order to improve student learning outcomes optimally.

Conclusion

Based on the results of the literature review that has been conducted, it can be concluded that the use of *Flipbook learning media* has a significant influence on student learning outcomes in science science subjects in elementary school. *Flipbooks* as an interactive learning medium are able to increase student involvement in the learning process, provide an interesting visual experience, and support a deeper understanding of concepts. Several studies have shown that this media is effective in improving learning outcomes, which is evidenced by the increase in pretest and posttest scores after the use of *Flipbook* in learning. In addition, the Flipbook-based learning model can also be integrated with cooperative learning methods such as Jigsaw, which further increases the effectiveness of learning. Thus, *Flipbook* can be considered one of the effective learning media innovations in improving the quality of education at the elementary school level. Teachers and educators in elementary schools are advised to start integrating *Flipbook* learning media in the social studies learning process to increase students' interest and learning outcomes. Further development of *Flipbook media* needs to be done by adjusting the content to the needs of students and the development of the applicable curriculum.

References

Al Fadillah, Y., & Akbar, A. R. (2024). Strategi Desain Pembelajaran Adaptif Untuk Meningkatkan Pengalaman Belajar di Era Digital. *Jurnal Pendidikan Sains Dan Teknologi Terapan | E-ISSN*, *1*(4), 354–362.

Amalia, S. N., Millati, F. A., & Setyasto, N. (2023). Pengembangan media pembelajaran flipbook untuk mening. *Prima Magistra: Jurnal Ilmiah Kependidikan*, *4*(3), 451–460.

Arisandhi, G. A. M. M., Wibawa, I. M. C., & Yudiana, K. (2023). Flipbook: Media Pembelajaran Interaktif Untuk Meningkatkan Kognitif IPA Siswa Sekolah Dasar. *Mimbar PGSD Undiksha*, *11*(1), 165–174.

Awaludin, K., & Yulianto, S. (2024). Penggunaan Media Flipbook Terhadap Hasil Belajar Siswa Mata Pelajaran IPAS Materi Membangun Masyarakat Yang Beradab. *Journal of Education Action Research*, *8*(1), 72–79.

Aziz, M. A., Idris, M., & Irawan, D. B. (2024). Pengembangan Media Pembelajaran Flipbook Digital Legenda Pulau Kemarau Pada Pembelajaran IPS. *Journal Pendidikan Ilmu Pengetahuan Sosial*, *16*(1), 8–15.

Edray, A. E., Nestity, A., Akhsan, H., & Ribkoh, R. (2024). Peningkatan Hasil Belajar Kognitif Menggunakan Media Pembelajaran Berbasis Flipbook pada Mata Pelajaran Pendidikan Pancasila di Kelas V SDN 002 Palembang. *Indonesian Research Journal on Education*, *4*(3), 136–142.

Febrianti, F. A. (2021). Pengembangan digital book berbasis flip pdf professional untuk meningkatkan kemampuan literasi sains siswa. *Caruban: Jurnal Ilmiah Ilmu Pendidikan Dasar*, *4*(2), 102–115.

Hajar, S. (2024). Penggunaan Media Pembelajaran Berbasis Teknologi Dalam Menumbuhkan Minat Siswa Terhadap Matematika Di Madrasah Aliyah. *Jurnal El-Hamra: Kependidikan*

dan Kemasyarakatan, *9*(3), 292–298.

Huwaidi, D. F. N., & Ansori, I. (2024). Pengembangan Media Pembelajaran Flipbook dengan Model Pembelajaran Problem Based Learning untuk Meningkatkan Hasil Belajar Muatan Pelajaran IPS pada Siswa Kelas V SD Negeri 2 Singorojo Kabupaten Kendal. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, *9*(04), 902–916.

Juliani, R., & Ibrahim, N. (2023). Pengaruh media flipbook terhadap hasil belajar Bahasa Indonesia siswa kelas IV di sekolah dasar. *ELSE (Elementary School Education Journal): Jurnal Pendidikan dan Pembelajaran Sekolah Dasar*, *7*(1), 19–26.

Julianti, J., Fitrisita, A., & Fatimah, S. (2024). Taksonomi Ilmu Pengetahuan: Ilmu Itu Beraneka Ragam Spesialisasi Dan Disiplin Interdisipliner. *Cendekia: Jurnal Ilmu Pengetahuan*, *4*(4), 623–632.

Kusuma, A. S., Setiadi, D., & Handayani, B. S. (2023). Pengembangan Instrumen Questioning Skills Berdasarkan Domain Kognitif Taksonomi Bloom Revisi Untuk Evaluasi Kemampuan Bertanya Siswa SMA Pada Pembelajaran Biologi. *Jurnal Ilmiah Profesi Pendidikan*, *8*(4), 2668–2680.

Lestyono, E. F., Solihin, A., Rachmadyanti, P., Kristanto, A., & Dwinata, A. (2024). Leveraging Google Maps and Generative AI for Geography Education: Insights for Special Needs Students. *Educative: Jurnal Ilmiah Pendidikan*, *2*(3). https://doi.org/10.70437/educative.v2i3.725

Maghfiroh, A. N., Daksana, M. F. E. H., & Salma, S. N. (2024). Efektivitas penggunaan media pembelajaran interaktif dalam pembelajaran matematika di sekolah dasar. *Griya Journal of Mathematics Education and Application*, *4*(1), 55–64.

Masithoh, A. (2022). Pengaruh model pembelajaran jigsaw menggunakan media flipbook terhadap hasil belajar ips kelas v sd. *Jurnal BELAINDIKA (Pembelajaran Dan Inovasi Pendidikan*, *4*(1), 21–27.

Mujiatun, S., Sumarno, S., & Dwijayanti, I. (2023). Analisis Kebutuhan Pengembangan Media Pembelajaran Flipbook Pada Pembelajaran IPA Untuk Siswa Kelas V Sekolah Dasar. *SOKO GURU: Jurnal Ilmu Pendidikan*, *3*(1), 55–68.

Mulyani, P. K. (2024). Pengembangan Media Flipbook Interaktif Berbasis Website untuk Meningkatkan Hasil Belajar Muatan Pembelajaran IPAS Materi Gaya Siswa Kelas IV SDN Pakintelan 01 Kota Semarang. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, *9*(03), 825–839.

Nirmala, N. S., & ISTIANAH, F. (2020). Pengembangan Media Pembelajaran Flipbook sebagai media belajar pada pembelajaran IPA materi metamorfosis kelas IV di Sekolah Dasar. *Jurnal Penelitian Pendidikan Guru Sekolah Dasar*, *8*(1).

Nurwidiyanti, A., & Sari, P. M. (2022). Pengembangan media pembelajaran flipbook berbasis literasi sains pada pembelajaran IPA sekolah dasar. *Jurnal Basicedu*, *6*(4), 6949–6959.

Nuryani, L., & Abadi, I. G. S. (2021). Media pembelajaran flipbook materi sistem pernapasan manusia pada muatan IPA siswa kelas V SD. *Jurnal Ilmiah Pendidikan Dan Pembelajaran*, *5*(2), 247–254.

Preti, Z. (2024). Pengaruh Model Problem Based Learning Berbantuan Media Flipbook

Terhadap Hasil Belajar Ipas Pada Peserta Didik Di Sekolah Dasar (Penelitian Kuantitatif Quasi Eksperimen Pada Mata Pelajaran IPAS Kelas V di SDN 223 Bhakti Winaya. *Doctoral dissertation, FKIP UNPAS*.

Saputra, N. E., Zumrotun, E., & Attalina, S. N. C. (2024). Pengaruh media pembelajaran berbasis flipbook terhadap hasil belajar IPAS di Kelas IV SDN 2 Kuanyar. *Jurnal Simki Pedagogia*, *7*(1), 317–327.

Sari, S. N. M., & Isdaryani, B. (2024). Efektivitas Model PjBL Berbantuan E-Modul Berbasis Flipbook untuk Meningkatkan Hasil Belajar Ipas di Sekolah Dasar. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, *9*(3), 88–101.

Sipuan, S., Warsah, I., Amin, A., & Adisel, A. (2022). Pendekatan Pendidikan Multikultural. *Aksara: Jurnal Ilmu Pendidikan Nonformal*, *8*(2), 815. https://doi.org/10.37905/aksara.8.2.815-830.2022

Solihin, A., Rachmadyanti, P., & Setiawan, R. (2024). Rancang Bangun Vis.Map Berbasis Engklek Sebagai Media Eksistensi Kearifan Lokal Dalam Fase Digitalisasi di Era Gen Z: Studi Kasus Sekolah Dasar. *Publikasi Pendidikan*, *14*(2), 213. https://doi.org/10.26858/publikan.v14i2.63540

Solihin, A., & Rahmawati, I. (2024). Kartu Eksplorasi Etnomatematika-QR Pada Materi Bangun Datar Kelas IV Sekolah Dasar. *Jurnal Review Pendidikan Dasar : Jurnal Kajian Pendidikan dan Hasil Penelitian*, *10*(1), 64–79. https://doi.org/10.26740/jrpd.v10n1.p64-79

Srirahmawati, I., Hidayat, H., & Andang, A. (2024). Analisis Penggunaan Media Pembelajaran Berbasis Digital pada Pembelajaran IPAS untuk Mendukung Pembelajaran Terdiferensiasi. *Edu Sociata: Jurnal Pendidikan Sosiologi*, *7*(2), 91–99.

Sukaetin, A., Kurniasari, R., & Setiawan, W. E. (2022). Penggunaan Media Peta Timbul Untuk Meningkatkan Aktivitas Dan Hasil Belajar IPS Pada Materi Keragaman Suku Bangsa Dan Budaya Di Indonesia. *Sebelas April Elementary Education*, *1*(2), 1–10.

Tarofil, N., Prastyo, L., Solihin, A., Subrata, H., & Daoyi, Z. (2024). *Enhancing Digital Literacy in Eighth-Grade Students through AI-Integrated ProProfs . com and Differentiated Instruction*. *2*(3), 160–168. https://doi.org/10.70437/educative.v2i3.812

Taufik, A., & Prasetyaningtyas, F. D. (2024). Pengembangan Media Pembelajaran E-Mas (E-Modul Ipas Berbasis Flipbook Untuk Meningkatkan Hasil Belajar Ipas Materi Aktivitas Ekonomi Masyarakat Di Sdn Wates 02 Ngaliyan Semarang. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, *9*(3), 206–219.

Widodo, M. B. P., Aula, A. F. Y., Riswanti, M. L., & Rozi, A. F. (2023). *Society 5.0 pembelajaran IPS*. Cahya Ghani Recovery.