

Comparison of Cognitive Learning Outcomes Among Eighth-Grade Junior High School Students Using Monopoly Games and Pop-up Books as Educational Media in ASEAN Social Studies

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ABSTRACT

This study investigates the comparative effectiveness of two educational media—Monopoly game media and Pop-up Books—on cognitive learning outcomes in social studies, specifically ASEAN material, among class VIII students at SMP Negeri 1 Talang Ubi. Interactive media like Monopoly games are hypothesized to better engage students and enhance understanding compared to traditional Pop-up Books. A quasi-experimental design was employed, with class VIII students as the study population. Using purposive sampling based on pretest scores, class VIII.7 was designated as the experimental group using Monopoly games, while class VIII.2 served as the control group using Pop-up Books. Cognitive learning outcomes were measured through validated and reliable cognitive tests. Data were analyzed using a t-test to compare the effectiveness of the two instructional media. The t-test analysis revealed a significant improvement in cognitive outcomes for the experimental group compared to the control group. Students who utilized Monopoly game media demonstrated higher cognitive learning gains, suggesting enhanced engagement and understanding of ASEAN material. The findings suggest that interactive educational games, such as Monopoly, can more effectively enhance cognitive learning in social studies compared to traditional methods like Pop-up Books. This may be attributed to the engaging and participatory nature of game-based learning. Interactive game-based educational tools hold significant potential for improving student learning outcomes in social studies. Educators are encouraged to consider integrating such tools to foster better cognitive engagement and learning effectiveness in similar educational contexts.

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1. INTRODUCTION

Human efforts to develop their potential and foster virtues for sustaining existence in social life are primarily achieved through education. Education is understood as a lifelong process aimed at self-development, enabling individuals to contribute meaningfully to society and the nation (Fau et al., 2023). Primary education, as a critical component of the formal education system, serves as the foundation for students' progression to secondary and higher education. At the core of primary education is the Junior High School (SMP) level. Education is implemented through a structured curriculum, which acts as a roadmap for the educational process and a means to achieve desired outcomes (Pane & Aly, 2023). This curriculum encompasses various subject areas taught across educational levels, including primary and secondary education, where Social Studies stands as a key subject.

21st-century learning expects the role of teachers in providing various innovations in the learning process. The innovations provided in learning include the use and utilization of appropriate components of teaching and learning activities to increase the motivation and desire of students to be competent. Social studies learning is directed to transform so that its implementation is in accordance with the demands of the times. One aspect of the expected changes is the improvement of teacher performance and professionalism, especially in becoming a facilitator in learning (Safitri, 2021).

In 21st-century education, teachers are encouraged to adopt innovative instructional strategies to create an active and engaging classroom atmosphere. Teachers not only manage the class but also play a crucial role in implementing diverse learning media to support knowledge transfer effectively (Rusijono et al., 2020). Among various instructional media, Monopoly games and Pop-up Books have demonstrated potential to enhance students' motivation and understanding. Monopoly games can make learning more interactive and enjoyable, leading to improved engagement and academic achievement in social studies (Bukhari Masruri & Joko Raharjo, 2022). Likewise, Pop-up Books, with their three-dimensional visuals, capture students' attention, enhancing their involvement and curiosity (Setiyanigrum, 2020). The challenge faced by the world of education today is that teachers, as the front guard, must have good attitudes and personalities, and skillfully use various teaching media and methods (Rusijono et al., 2020). Skills in learning process activities that are no less important are the teacher's skills in utilizing learning media when teaching and learning (Mukarromah & Andriana, 2022). Everything that can be used to support the process of delivering knowledge to students is considered learning media. Learning media helps teachers in the process of transferring knowledge efficiently (Rohman & Susilo, 2019).

Game-based learning (GBL) has garnered significant attention in educational research, particularly in its alignment with cognitive development theories such as Piaget's cognitive development theory and Vygotsky's social constructivism. Both theories emphasize the importance of active engagement in learning processes, which GBL effectively facilitates. Piaget's theory posits that cognitive development occurs through stages, where learners construct knowledge through interaction with their environment and peers (Pan & Hu, 2022). GBL provides a dynamic environment where learners can experiment, make decisions, and reflect on their actions, thereby promoting cognitive growth. For instance, cooperative learning, a key component of GBL, has been shown to enhance neural synchronization among peers, reinforcing the idea that collaborative efforts lead to deeper understanding and cognitive development (Pan & Hu, 2022).

Vygotsky's social constructivism further supports the notion that social interaction is crucial for cognitive development. According to Vygotsky, learning is inherently a social process, and knowledge is co-constructed through dialogue and collaboration (Pan & Hu, 2022). GBL environments often encourage teamwork and communication, allowing students to share ideas and strategies, which aligns with Vygotsky's emphasis on the social context of learning (Zhong, 2019). The collaborative nature of games can foster a sense of community among learners, enhancing motivation and engagement, which are vital for effective learning (Zhong, 2019). When comparing the effectiveness of Monopoly games to pop-up books in engaging students, several factors come into play. Monopoly, as a game, involves strategic thinking, decision-making, and social interaction, which are critical components of cognitive development. The game requires players to engage in complex problem-solving and critical thinking, skills that are essential for higher-order cognitive processes (Zhong, 2019). In contrast, while pop-up

books can stimulate imagination and provide tactile engagement, they often lack the interactive and competitive elements that games like Monopoly offer (Cordray et al., 2021). The active participation required in Monopoly can lead to a more profound understanding of concepts such as economics and social dynamics, as players must navigate real-time decisions and consequences (Zhong, 2019).

The immersive nature of Monopoly allows for experiential learning, where students can apply theoretical knowledge in a practical context. This aligns with Piaget's assertion that knowledge is constructed through active engagement with the environment (Pan & Hu, 2022). In contrast, pop-up books, while beneficial for introducing concepts in a visually appealing manner, may not provide the same level of cognitive challenge or social interaction (Cordray et al., 2021). Therefore, while both educational tools have their merits, Monopoly games may offer a more effective platform for engaging students in a manner that aligns with cognitive development theories. In summary, game-based learning, particularly through interactive games like Monopoly, aligns well with cognitive development theories by promoting active engagement, social interaction, and critical thinking. These elements are crucial for fostering cognitive growth, making Monopoly a potentially more effective educational tool compared to pop-up books.

This study examines the impact of using Monopoly game media and Pop-up Books on students' cognitive learning outcomes in social studies at SMP Negeri 1 Talang Ubi. The goal is to explore how these interactive learning tools address challenges related to low achievement in cognitive outcomes. Social studies, an essential subject at the junior high level, combines various disciplines to foster civic knowledge and skills among students, supporting their development into competent citizens (National Council for Social Studies, 2023).

However, recent observations at SMP Negeri 1 Talang Ubi reveal persistent issues in social studies learning. Notably, more than 75% of students scored below the minimum criteria on midterm assessments, indicating low cognitive achievement. This challenge is partly attributed to conventional teaching methods, where the teacher remains the primary source of information, with limited integration of diverse media or interactive tools to engage students. This situation highlights the need for innovative teaching methods and media to stimulate learning and improve outcomes.

Another problem that occurs in the social studies learning process is that the teacher is still the main source of information in the classroom. All learning information comes from the teacher, who has not utilized other learning resources such as the internet to support sources of information related to learning materials. Researchers also observed and found problems related to learning implementation management indicators. The teaching methods used by teachers still felt boring and less diverse. The cause can be seen from the lack of variety in the use of learning components, such as methods that are still conventional with lectures as the main approach, as well as limitations in utilizing learning media other than textbooks.

Learning media is a crucial component that significantly influences the success of the learning process. As highlighted by Yusuf (2018), learning outcomes are shaped by both internal and external factors. Internal factors encompass elements such as talent, intelligence, and individual preparedness, whereas external factors include educators, the environment, infrastructure, teaching materials, and learning conditions. The suboptimal social studies learning outcomes among students at SMP Negeri 1 Talang Ubi can be partly attributed to external factors, specifically inadequate learning conditions, including the ineffective utilization of social studies learning media.

Sugiantoro et al. (2020) emphasize that teaching media play a crucial role in enhancing the quality of social studies education. Enhancing the quality of social studies learning is part of broader efforts to improve educational standards in Indonesia, with learning media serving as a vital component of the teaching process. According to Nahdiroh and Dwi Arisona (2020), learning media have been shown to positively influence students' social studies achievement. Therefore, this study focuses on improving cognitive learning outcomes in social studies through the effective use of diverse learning media.

One type of media that can improve student learning outcomes is the monopoly game media. This media acts as a tool to achieve optimal academic achievement and, generate strong learning motivation and help students achieve a deep understanding of subjects including social studies. According to

Bukhari Masruri & Joko Raharjo (2022), the use of media related to the Monopoly game can increase the effectiveness of learning.

Agreeing with Masruri, Relita & Karnia's (2021) research on Monopoly game media found that the use of Monopoly games can improve learning achievement in Integrated Social Studies subjects. In addition, the fact that students can learn while playing the Monopoly game is more interesting and fun and can attract student attention (Khoiron and Rezania, 2020). Even according to (Riskiani & Wulandari, 2022), the role of Monopoly game media in social studies learning can also make social studies learning material easier to understand because it becomes more concrete.

Besides Monopoly, Pop-up Book is another alternative to educational media that can be chosen to increase the effectiveness of social studies teaching. The three-dimensional visual display that attracts attention to this media can make students more involved in participating in learning activities. Illustrated creation books that can move and have a dimensional shape when the page is opened are known as Pop-Up Book. According to Setyanigrum (2020)), this book offers a more attractive appearance and visualization to achieve a deep understanding for students of the material being taught.

Improvements in cognitive, emotional, and psychomotor abilities can be achieved by utilizing Pop-up Book in teaching. Furthermore, Rachmad & Fauzi (2018) stated that Pop-up Book was able to increase learning motivation from each research action cycle. Research by Maula & Suprayitno (2019); and Winda et al. (2022) concluded that the use of pop-up book media for social studies lessons can increase students' desire for learning. Pop-up books encourage learners to be curious to see the shaped images and read the information listed in the form. Agree with Sunarti et al. (2023), who stated that Pop-up Book is a useful learning resource to improve learners' knowledge and skills.

Previous studies have evaluated the use of Monopoly game media and Pop-up Book in learning activities. However, previous studies only compared the use of Monopoly game media or Pop-up Book with image media only. This study will examine the differences in students' cognitive learning outcomes by using Monopoly and Pop-up Book game media and will see the differences in learning outcomes between the two media. In addition, the previous research used literature study research methods and classroom action research with only one media, while this research will use quasi-experimental methods with 2 different treatments. Prior research often compares Monopoly games or Pop-up Books against traditional image media, rather than examining the two media in tandem. This study fills that gap by using a quasi-experimental design to directly compare the effects of Monopoly games and Pop-up Books on cognitive learning outcomes in social studies. Through this approach, the study seeks to provide empirical insights into the relative effectiveness of these two media in improving students' cognitive achievement in social studies, particularly regarding ASEAN material.

While the existing studies provide valuable insights into the positive effects of learning media, particularly the Monopoly game, there appears to be a lack of in-depth exploration into how various types of learning media, including digital tools and interactive platforms, might compare to traditional game-based methods like Monopoly in enhancing social studies learning outcomes. Moreover, the studies primarily focus on cognitive learning outcomes, with less attention given to the broader impact of such media on other aspects of learning, such as critical thinking, creativity, and collaborative skills. There is also a need for more research that examines the long-term effects of using game-based learning media on students' overall academic achievement and their attitudes toward social studies. Therefore, future research could explore the comparative effectiveness of different media types and assess the multifaceted impact of game-based learning on students' development beyond academic achievement.

This research is focused on studying whether the independent variable is able to make a difference to the dependent variable before and after the intervention. Monopoly and Pop-up Book game media are independent variables in the study, while the variables affected in this study are indicators of cognitive learning outcomes in ASEAN material. Based on the background that has been conveyed and the exposure of previous related research, Researchers want to find evidence of differences in cognitive learning outcomes of students before and after using Monopoly and Pop-up Book game media.

2. METHODS

This study adopts a quantitative approach with an experimental research design, specifically using a quasi-experimental design. A quasi-experimental design was chosen over a true experimental design due to practical constraints that prevented random assignment of participants to groups. This study selected pre-existing classroom groups (class VIII.7 and VIII.2) based on specific considerations, such as their availability and similarity in terms of prior knowledge of ASEAN topics. Random assignment was not feasible due to the nature of the educational setting, where students are typically grouped based on school scheduling and class structures. As a result, the non-equivalent control group design was employed to allow for a comparison between two groups: one receiving the treatment with Monopoly game media (experimental group) and the other with Pop-up Book media (control group).

Both groups underwent a pretest to assess their baseline knowledge of ASEAN topics before the learning interventions. The experimental group engaged with the Monopoly game media, while the control group used the Pop-up Book as a learning tool. At the conclusion of the learning activities, a post-test was administered to both groups to evaluate their cognitive learning outcomes and the effectiveness of the two media types.

The sampling technique used in this study was non-probability sampling with purposive sampling. This technique was employed because the researcher selected the classes based on specific criteria, such as the students' familiarity with social studies content, their class schedules, and the availability of the teachers to implement the treatments. Classes VIII.7 and VIII.2 were chosen because they were deemed comparable in terms of prior academic performance based on the pretest results, allowing for a fair comparison between the two groups. This purposive sampling approach was used to ensure that the selected groups were suitable for the study's objectives and that any differences observed in the post-test results could be attributed to the intervention rather than pre-existing disparities between groups.

In this context, the data collection technique chosen was a test. Indicators of cognitive learning outcomes of social studies learning is the variable under study, and the data test is conducted to find out more about the variable. For this study, a cognitive understanding test of ASEAN material will be conducted to obtain data. ASEAN material cognitive understanding test is a test used to measure the level of cognitive understanding of students in social studies learning ASEAN material. Two types of tests are carried out, namely pretest and posttest. Pretest and post-test are tests conducted to measure the level of understanding of students. The understanding of students in the experimental class and control group on ASEAN material is assessed using this instrument. The test used is in the form of multiple choice with a total of 20 items.

The validity test of the student cognitive understanding instrument was carried out in this study by looking at the product-moment correlation value or r count then compared to the r table with the number of respondents (N) of 30 people with an error rate of 5% of 0.361, after the validity test it was found that all items had an r count value greater than r table. The Cronbach Alpha technique was used to assess the reliability of this study. The SPSS 26 program was used for the reliability testing procedure. The Cronbach's Alpha result is $0.850 > 0.6$, thus, it can be stated that all variables are declared reliable and suitable for use in further testing. To determine the effect between the variables studied, the data obtained were then analyzed using quantitative data processing techniques. The data analysis method used is the independent and paired t test.

3. FINDINGS AND DISCUSSION

3.1 Differences in Cognitive Learning Outcomes between Pre- and Post-Tests for Each Group

Before presenting the differences in cognitive learning outcomes, it is important to highlight the participation and structure of the experimental assessment. Class VIII.7, designated as the experimental group using Monopoly game media, consisted of 31 students who fully participated in the pretest. The pretest served as a baseline measurement of their cognitive understanding of the ASEAN material prior to the intervention. Following the use of Monopoly game media in the instructional process, a post-test was conducted to evaluate the improvement in cognitive learning outcomes. The results of the pretest and post-test are summarized in Table 1, providing a comparative analysis of student performance and the effectiveness of the learning media used.

Table 1. Results of *Prestest* and *Post Test* of the Experimental Group

Aspect	Result
Total Value	1285
Highest Score	70
Lowest Score	20
Average	41,45
Number of Students	31

Based on this table, the highest score obtained by students in this group was 70, while the lowest score obtained by students was 20. The pretest for class VIII.2 was attended by all 32 students.

Table 2. Class VIII.2 Pretest Statistics (Control)

Aspect	Result
Total Value	1305
Highest Score	65
Lowest Score	20
Average	40,78
Number of Students	32

From the results of descriptive statistical tests, data information was obtained for class VIII.7 with an average value of 41.45, while class VIII.2 had an average value of 40.78. A comparison of the average pretest scores for the two groups is shown in the following table.

Table 3. Comparison of Pretest Average Scores

Class	Experiment	Control
Mean	41,45	40,78
Difference	0,67	

The average pretest scores of the two groups show minimal difference, with a relatively close gap of 0.67 points. In the post-test, all 31 students in class VIII.7 (the experimental group) were assessed after undergoing instruction using the Monopoly game media.

Table 4. Post-test statistics for Class VIII.7 (Experiment)

Aspect	Result
Total Value	2615
Highest Score	100
Lowest Score	60
Average	84.35
Number of Students	31

From Table 4, the total post-test score obtained from 31 students was 2,615. The average score (mean) of 84.35 was higher during the initial test (pretest). The highest score obtained by class VIII.7 students is 100 and the lowest score is 60. Post-test class VIII.2 (control group) was attended by all 32 students.

Table 5. Post-test statistics for Class VIII.2 (Control)

Aspect	Result
Total Value	2390
Highest Score	95
Lowest Score	55
Average	74.69
Number of Students	32

From table 5, the highest score in class VIII.2 is 95 and the lowest score is 55. From descriptive statistical analysis the average post-test value was 84.35 for the experimental group, and 74.69 for the

control group. Comparison of the mean values of the two groups is shown in Table 6.

Table 6. Comparison of Post-test Average Values

Class	Experiment	Control
Mean	84.35	74.69
Difference	9.66	

Cognitive learning outcomes with Monopoly game media are higher than with Pop-up Book media. A hypothesis test or t-test needs to be carried out to conclude whether the difference in cognitive learning outcomes between the two groups is statistically significant.

3.2 Comparison of the Effectiveness of Monopoly Game Media versus Pop-up Books

Paired sample tests (paired t-test) and unpaired sample tests (independent t-test) were carried out in testing research hypotheses with an error tolerance of 5%. Based on the results of the hypothesis test carried out, the t test results were obtained which are displayed in Table 7.

Table 7. T Test Results for Class VIII.7 (Experiment)

Test	Average	t count	t table	Sig.	Percentage
Pretest	41.45	20.096	2.04227	0.000	103%
Post-test	84.35				

The results of the t-test of this study found that there is a difference in cognitive learning outcomes of students in class VIII SMP Negeri 1 Talang Ubi before and after using monopoly game media in social studies subjects on ASEAN material, is accepted. The magnitude of the difference in average scores by using Monopoly game media is 42.9.

Furthermore, based on the results of the hypothesis test carried out, the t test results are shown in Table 8.

Table 8. T test results Class VIII.2 (Control)

Test	Average	t count	t table	Sig.	Percentage
Pretest	40.78	16.913	2.03951	0.000	83%
Post-test	74.69				

The results of the t-test of this study found that there is a difference in students' cognitive learning outcomes in class VIII SMP Negeri 1 Talang Ubi before and after using Pop-up Book media in social studies subjects on ASEAN material", is accepted. The difference in average scores before and after using Pop-up Book media is 33.91. In the third hypothesis test obtained, t test data was displayed in table 9.

Table 9. Post-test t test of Experimental Group and Control Group

Group	Average	T count	T table	P Value	Difference
Monopoly	84.35	4.223	1.99962	0.000	9.667
Pop-up Book	74.69				

The results of hypothesis testing explain that there is a difference in cognitive learning outcomes of students in class VIII SMP Negeri 1 Talang Ubi by using Monopoly and Pop-up Book game media in social studies subjects ASEAN material, is accepted. The magnitude of the difference in the average value of social studies cognitive learning outcomes of ASEAN material with Monopoly Game media and Pop-up Book is 9.667.

3.3 Practical Implications for Teaching Practices in Social Studies

The findings from this study indicate several practical implications for teaching practices in Social Studies. Firstly, the use of interactive media, such as Monopoly, significantly enhances cognitive learning outcomes compared to traditional media like Pop-up Books. In the experimental group, the post-test average score of 84.35 reflects a notable improvement over the control group's average of 74.69, suggesting that game-based media may aid students in grasping complex, often abstract concepts inherent to Social

Studies. This approach offers a more engaging learning experience, potentially fostering greater knowledge retention and deeper understanding.

Secondly, incorporating game-based learning in the classroom can improve student motivation and engagement. The Monopoly game facilitates active participation, creating a dynamic and enjoyable environment that enhances students' interest in learning. Through this interactive format, students are likely to retain information more effectively as the experience becomes both meaningful and relevant to them. This method also has the potential to mitigate the common fatigue associated with traditional, lecture-heavy instruction, thus promoting sustained attention and involvement in the subject.

Moreover, game media in Social Studies instruction encourages collaborative learning. Monopoly, by design, promotes communication, teamwork, and healthy competition, allowing students to practice interpersonal skills crucial for Social Studies, such as decision-making, negotiation, and understanding consequences. These skills align with the critical thinking and social interaction that Social Studies aims to develop, enriching the overall learning process beyond mere content acquisition.

The study also underscores the need for innovative, media-driven teaching strategies. Tools like Monopoly can be adapted to various topics within Social Studies, including geography, history, and economics, with minor adjustments to game content. This flexibility opens possibilities for teachers to incorporate customized game elements that align with curriculum goals and the specific needs of their students.

The successful use of educational games in this context suggests that game-based learning could be considered for formal inclusion in Social Studies curricula. As more schools embrace project-based and game-based learning, integrating these methods can provide a structured yet versatile approach to achieving learning objectives. In sum, the study highlights that educational games like Monopoly not only improve cognitive learning outcomes but also support students' socio-emotional development, providing educators with effective strategies to address the diverse and evolving needs of students in contemporary classrooms.

Discussion

Cognitive Learning Results of Class VIII Students of SMP Negeri 1 Talang Ubi Before and After Using Monopoly Game Media in Social Sciences Subjects ASEAN Material

The findings of this study support the hypothesis that cognitive learning outcomes among class VIII students at SMP Negeri 1 Talang Ubi show significant improvement before and after using Monopoly game media in social studies lessons on ASEAN material. This demonstrates the feasibility and effectiveness of Monopoly game media in enhancing students' cognitive learning outcomes in social studies.

These results align with the research of Rakhmayanti and Subagio (2019) and Relita and Karnia (2021), which examined the impact of Monopoly game media on the learning outcomes of grade IV elementary students. Both studies concluded that Monopoly game media significantly improved student engagement and cognitive learning outcomes. Additionally, Wahyudi (2020) conducted a related study titled "The Effectiveness of Monopoly Game as Media to Enhance 10th Graders Speaking in Descriptive Text," which revealed that Monopoly games had a positive and significant impact on students' speaking skills. These consistent findings reinforce the potential of Monopoly game media as an effective educational tool across different subjects and grade levels.

This research positions itself in the context of literature regarding the use of effective teaching media in junior high school education. The findings of this study support the theory of learning media as one of the learning components that can improve the quality of social studies learning. Different from previous studies conducted on elementary and high school students who tested speaking ability as the dependent variable and compared the effectiveness of Monopoly game media with picture media alone, this study was conducted specifically by comparing the use of Monopoly game media and Pop-up Book on cognitive learning outcomes of grade VIII students at the junior high school level in social studies subject matter ASEAN. Monopoly game media reduces boredom in learning, increases students' concentration when

receiving learning materials, and increases independence and enthusiasm in learning activities (Suciati et al., 2016).

Cognitive Learning Results of Class VIII Students of SMP Negeri 1 Talang Ubi Before and After Using Pop-up Book Media in Social Sciences Subjects with ASEAN Material

The findings of this study support the hypothesis that there is a difference in cognitive learning outcomes of students in class VIII SMP Negeri 1 Talang Ubi before and after using Pop-up Book media in social studies subjects of ASEAN material. This shows that Pop-up Book media is recommended to be used in social studies learning, especially to improve students' cognitive learning outcomes.

This study found an increase in social studies cognitive learning outcomes of ASEAN material after the application of Pop-up Book media. This research supports the theory that Pop-up Book media can make learning more active and effective, supporting the theory put forward by Anies Solichah & Mariana (2018) about Pop-up Book media that can attract attention and create a feeling of pleasure for students during learning activities.

The findings of this study are in line with the research of Rizkiyah & Mulyani (2019) on the use of Pop-up Books in improving and increasing social studies learning outcomes in grade IV students at the elementary school level. Pop-up book media triggers curiosity and encourages students to learn while creating an interesting and fun learning environment, so it can be a recommendation for learning media in social studies lessons. Furthermore, this research is supported by literature study conducted by Setiyanigrum (2020), which concluded that Pop-up Book media is effective and feasible to use in learning activities. Pop-up Book provides an interesting experience for students when opening each page of a book that contains three-dimensional elements.

This research positions itself in the context of literature regarding the use of effective teaching media in junior high school education. The findings of this study support the theory of learning media as one of the learning components that can improve the quality of social studies learning. Different from previous studies conducted on elementary and high school students who tested speaking ability as the dependent variable and compared the effectiveness of monopoly game media with picture media only, this study was conducted specifically by comparing the use of monopoly game media and Pop-up Book on cognitive learning outcomes of grade VIII students at the junior high school level in the social studies subject of ASEAN material.

Differences in Cognitive Learning Outcomes of Class VIII Students at SMP Negeri 1 Talang Ubi Using Monopoly Game Media and Pop-up Books in Social Sciences Subjects with ASEAN Material

The results of the data analysis of this study reveal that there are differences in cognitive learning outcomes by using monopoly game media and Pop-up Book. Learning outcomes using monopoly game media are better than with Pop-up Book media. This research explains that social studies learning is more effective and fun through the media monopoly game. Students are more enthusiastic and find it easy to understand the material ASEAN.

The findings of this study support the research of Nurhayati et al. (2022), who concluded that social studies learning achievement of elementary school students can be raised effectively with monopoly game media because it has the advantage of creating a learning atmosphere that is not boring. The results of this study are also consistent with Bukhari Masruri & Joko Raharjo (2022), which showed an increase in the learning outcomes of research groups treated with monopoly game media.

This study supports the theory of improving cognitive learning outcomes by using interactive learning media. The previous studies are expanded with this study which examines a specific comparison between Monopoly game media and Pop-up Book. The difference between this study and previous research lies in the variables used. This study compares two media that are interactive. In addition, the research method used enriches knowledge about teachers' efforts to improve the quality of learning in this case on cognitive learning outcomes indicators. The results showed that both learning media can contribute to improving learning outcomes. Monopoly game media is better at improving the cognitive learning outcomes of students at the junior high school level in social studies ASEAN material. This

provides new insights into the practical application of interactive teaching media in social studies subjects at the junior high school level.

Students experience increased willingness and intensity of learning with the use of monopoly game media (Khasanah & Suripno, 2020). Monopoly game media presents a fun learning atmosphere and provides several advantages, including making learning more effective, deepening students' understanding, increasing students' learning motivation and intensity, students become more collaborative, and daring to argue (Restiana et al., 2020). Monopoly game media is an educational and interactive game tool that has several advantages to be applied in the learning process, namely games are very fun to do, games cause student participation, games train social interaction between students, are more dynamic and flexible (Rakhmayanti & Subagio, 2019).

Monopoly games inherently offer a high level of interactivity, as they require players to make decisions, strategize, and engage in continuous gameplay. This interactivity translates into active learning, as students become participants rather than passive recipients. In contrast, while pop-up books captivate attention with their three-dimensional visuals, their interactivity is limited to tactile exploration and visual observation. Monopoly games demand ongoing engagement, which helps students process and retain information effectively. The competitive aspect of Monopoly encourages motivation and sustained interest. Students are naturally drawn to outperform their peers, which can lead to a deeper engagement with the learning material. Competition also enhances problem-solving skills, as players must adapt strategies in real-time to achieve objectives. Pop-up books, while visually engaging, lack a competitive framework, which may lead to less cognitive stimulation over extended periods. Monopoly games often involve teamwork, where students collaborate, negotiate, and communicate to achieve common goals. This dynamic promotes social interaction, critical thinking, and collective problem-solving. These skills are particularly beneficial in subjects like social studies, where understanding social dynamics and decision-making processes is crucial. Pop-up books do not inherently support collaborative activities, focusing more on individual exploration.

The limitations of each medium present distinct challenges that educators must address to optimize learning outcomes. For Monopoly Games, logistical challenges are a primary concern. Setting up and facilitating game sessions demands considerable time and effort from educators. Teachers must ensure that the gameplay remains fair and aligned with the educational objectives, requiring constant supervision and intervention to maintain focus on learning goals. Furthermore, the competitive nature of Monopoly Games can sometimes lead to an overemphasis on winning. This excessive focus on competition may detract from the intended learning outcomes and risk alienating students who are less competitive, potentially diminishing their engagement and participation. On the other hand, Pop-Up Books exhibit limitations primarily related to engagement and adaptability. While they are initially captivating due to their three-dimensional visuals, their appeal tends to diminish quickly, especially among older students. This transient engagement reduces their effectiveness in sustaining students' interest over time. Additionally, the static nature of the content in Pop-Up Books poses a significant limitation. The information presented is fixed and does not adapt to the individual learning pace or specific needs of students. This rigidity can hinder deeper comprehension and long-term cognitive benefits compared to more dynamic and interactive media.

Students with a preference for interactive and competitive learning environments are likely to thrive with Monopoly games. However, those who enjoy solitary exploration or are visual learners might benefit more from pop-up books. Tailoring the medium to the learner's style can mitigate these limitations. Monopoly games outperform pop-up books in cognitive outcomes due to their interactive, competitive, and collaborative nature. However, integrating these tools effectively requires consideration of logistical constraints and student preferences. Combining the strengths of both media, such as integrating competitive elements into pop-up books or adding visual aids to Monopoly games, could provide a balanced approach to enhancing cognitive outcomes.

The findings of this research provide valuable insights for curriculum design and teacher professional development by highlighting the advantages and limitations of Monopoly games and Pop-up books as educational tools. Integrating these media into blended learning environments that incorporate digital

tools can enhance their effectiveness and align with contemporary educational trends. The research underscores the potential of interactive and visually engaging media to improve cognitive learning outcomes. Curriculum designers can leverage these insights by including Monopoly games and Pop-up books as part of a diversified pedagogical strategy. For example, Monopoly games can be integrated into subjects like social studies, economics, and geography to simulate real-world scenarios that encourage decision-making, strategic thinking, and collaboration. Pop-up books can serve as supplementary resources for topics requiring visual representation, such as history or natural sciences, to enhance conceptual understanding through illustrative storytelling.

To maximize the benefits of these tools, professional development programs should focus on training teachers in their effective use. Workshops could demonstrate how to align game mechanics with learning objectives, facilitate fair competition, and integrate reflective discussions post-activity to reinforce concepts. For Pop-up books, teachers could be trained to design activities that go beyond passive reading, such as creating collaborative projects where students produce their own interactive books to deepen their understanding of the subject matter. Blended learning environments provide a dynamic and flexible framework for integrating educational tools such as Monopoly games and Pop-up books, enhanced by digital technologies to mitigate their limitations and amplify their educational impact. This approach leverages the strengths of both media while incorporating innovative digital features that enrich the learning experience.

For Monopoly games, digital enhancements offer new possibilities for customization and engagement. Digital versions or custom game boards can be created using online platforms, allowing educators to tailor gameplay to specific curriculum topics. Integrating real-time leaderboards or analytics tools provides immediate feedback and fosters a competitive yet educational atmosphere. Additionally, combining gameplay with digital simulations or instructional videos helps bridge theoretical content with practical application, ensuring that the learning objectives remain central to the activity.

Similarly, Pop-up books can be augmented with technological advancements to enhance interactivity and appeal. By pairing physical books with augmented reality (AR) apps, students can explore virtual extensions of the book's content, such as animations or detailed visualizations, which bring static information to life. Digital versions of Pop-up books with interactive features like quizzes and branching storylines can cater to diverse learning styles and paces. E-learning platforms can further support these tools by hosting discussions or collaborative projects based on the themes presented in the books, fostering deeper engagement and critical thinking.

Hybrid activities offer a synergistic approach by combining the strengths of both tools within a blended framework. For instance, students can alternate between Monopoly gameplay and digital simulations to connect game-based scenarios with real-world applications, reinforcing critical concepts. Similarly, Pop-up books can be digitized and integrated into virtual learning environments, enriched with multimedia elements such as explanatory videos or gamified quizzes, ensuring an engaging and comprehensive learning experience.

This research informs educators and curriculum developers about the value of integrating interactive and engaging media into teaching. By incorporating Monopoly games and Pop-up books into a blended learning framework enriched with digital tools, educators can address diverse student needs, foster engagement, and improve cognitive learning outcomes. Professional development initiatives should emphasize the alignment of these tools with pedagogical goals and provide teachers with strategies to balance traditional and digital resources effectively.

This study has several limitations that should be acknowledged. First, the sample is limited to students from SMP Negeri 1 Talang Ubi, which restricts the generalizability of the findings. The study only involved eighth-grade students studying Social Studies with ASEAN material, which may not be representative of students from other schools or regions with differing educational contexts. Second, the research design employed was not randomized, which introduces the potential for selection bias and affects the internal validity of the study's results. A randomized controlled trial design would enhance the robustness of the findings and allow for more confident conclusions about the effectiveness of the media used. Third, the study only compared two specific media—Monopoly Game and Pop-up Book. While these

media were found to be effective, the research does not explore the potential impact of other interactive or digital learning media that may offer different outcomes. Additionally, the study did not account for external factors such as student motivation, prior knowledge, or teaching styles, which may also influence cognitive learning outcomes. These factors, if considered, could provide a more nuanced understanding of how different variables contribute to learning.

Future research should consider expanding the sample size and including students from multiple schools with diverse educational backgrounds to improve the generalizability of the findings. A larger and more varied sample would provide a more comprehensive understanding of how these teaching media impact cognitive learning outcomes across different student demographics. Additionally, employing a randomized experimental design would help to mitigate selection bias and increase the internal validity of the findings, allowing for stronger causal inferences regarding the effectiveness of the learning media. Future studies could also explore a wider range of interactive learning media, such as educational apps, video-based learning, or virtual reality, to compare their effectiveness in fostering cognitive learning outcomes in Social Studies or other subjects. Moreover, it would be beneficial to examine other factors influencing learning outcomes, such as intrinsic student motivation, learning styles, and teacher involvement, to provide a more holistic view of the variables affecting learning effectiveness. Finally, conducting longitudinal studies to assess the long-term impact of these media on students' knowledge retention and application in real-world contexts would provide valuable insights into the lasting benefits of using interactive media in education.

4. CONCLUSION

This study concludes that there are significant differences in the cognitive learning outcomes of class VIII students at SMP Negeri 1 Talang Ubi when using Monopoly game media versus Pop-up Book media for social studies on ASEAN material. Students using Monopoly game media improved their average scores from 41.45 (pretest) to 84.35 (post-test), reflecting a 42.9-point increase, with a p-value of 0.000. Similarly, students using pop-up book media showed an increase from 40.78 to 74.69, a 33.91-point improvement, which was also statistically significant (p-value = 0.000). However, the post-test average of the Monopoly game media group (84.35) was 9.66 points higher than that of the Pop-up Book group (74.69), and this difference was also statistically significant (p-value = 0.000). These findings demonstrate that Monopoly game media is more effective in improving cognitive learning outcomes than Pop-up Book media, highlighting the potential of interactive, game-based learning tools to enhance student engagement and understanding. The results underscore the value of incorporating such media in educational settings, particularly in junior high school social studies. Future studies could expand on these findings by exploring other interactive learning tools or assessing the long-term impacts of game-based learning strategies on student outcomes.

REFERENCES

- Anies Solichah, L., & Mariana, N. (2018). *Pengaruh Media Pop Up Book Terhadap Hasil Belajar Siswa Pada Mata Pelajaran Matematika Materi Bangun Datar Kelas Iv Sdn Wonoplintahan Ii Kecamatan Prambon*.
- Bukhari Masruri, M., & Joko Raharjo, T. (2022). *Journal Of Primary Education The Effectiveness Of Monopoly Media To Improve Learning Outcomes In Integrative Thematic Learning At Sd Negeri Tegalsari 01 Semarang* Article Info. <https://doi.org/10.15294/jpe.V11i3.36046>
- Cordray, H., Patel, C., & Prickett, K. (2021). Reducing children's preoperative fear with an educational pop-up book: a randomized controlled trial. *Otolaryngology*, 167(2), 366-374. <https://doi.org/10.1177/01945998211053197>
- Fau, J. F., Mendrofa, K. J., Wau, M., & Waruwu, Y. (2023). Pendidikan Jendela Dunia. *Jipmas : Jurnal Visi Pengabdian Kepada Masyarakat*, 04, 69–77. <https://ejournal.uhn.ac.id/index.php/Pengabdian>
- Khasanah, N. S., & Suripno, D. (2020). *Pengembangan Media Pembelajaran Permainan Monopoli Untuk Peningkatan Minat Belajar Peserta Didik Kelas Vii Smp Development Of Monopoly Game Learning Media*

- To Increase Students Interest In Learning Of Junior High School Students In Class Vii.*
- Maula, A., & Suprayitno. (2019). *Penggunaan Media Pop Up Book Penggunaan Media Pop Up Book Untuk Meningkatkan Hasil Belajar Ips Kelas Iv Sdn Jatirenggo I Glagah Lamongan.*
- Mukarromah, A., & Andriana, M. (2022). Peranan Guru Dalam Mengembangkan Media Pembelajaran. *Jser Journal Of Science And Education Research*, 1(1). <https://jurnal.insanmulia.or.id/index.php/jser/>
- Nahdiroh, S., & Dwi Arisona, R. (2020). Pengaruh Penggunaan Media Pembelajaran Berbasis Film Terhadap Hasil Belajar Ips Siswa Smp Materi Potensi Dan Pemanfaatan Sumber Daya Alam. In *Print) Asanka: Journal Of Social Sciences And Education* (Vol. 1, Issue 2). Online.
- National Council For The Social Studies. (2023). *Ncss Policy Manual 2023 Update (Version 5.4)*. https://www.socialstudies.org/sites/default/files/documents/ncss_policy_manual-update-v5.4-march_2023.pdf
- Nurhayati, Rosdianti, V., Sari, A., & Fransisca, S. (2022). Developing Elementary School's Social Studies Learning Using The Monopoly Game. *Indonesian Journal Of Multidisciplinary Science*, 1(6), 648–653.
- Pan, Y. and Hu, Y. (2022). Three heads are better than one: cooperative learning brains wire together when a consensus is reached. *Cerebral Cortex*, 33(4), 1155–1169. <https://doi.org/10.1093/cercor/bhac127>
- Pane, M., & Aly, H. N. (2023). Orientasi Dan Fungsi Kurikulum Dalam Pendidikan. *Journal On Education*, 05(02), 6165–6171.
- Rachmad, O. :, & Fauzi, F. (2018). Peningkatan Motivasi Belajar Ips Melalui Media Pop Up Pada Siswa Kelas Iv Sd N Gamping Sleman Yogyakarta Improving Learning Motivation In Social Studies Subject Of 4th Gradestudents Throught Pop Up Media In Sd N Gamping Sleman Yogtakarta. In *Jurnal Pendidikan Guru Sekolah Dasar Edisi* (Vol. 32).
- Rakhmayanti, E., & Subagio, Fx. M. (2019). *Efektivitas Penggunaan Media Monopoli Tematik Efektivitas Penggunaan Media Monopoli Tematik Terhadap Aktivitas Dan Hasil Belajar Kognitif Siswa Kelas Iv Di Sd Negeri Sumpat Sidoarjo.*
- Relita, D. T., & Karnia, K. (2021). Pengaruh Media Pembelajaran Permainan Monopoli Terhadap Hasil Belajar Ips Terpadu Di Smpn 3 Satu Atap Boyan Tanjung. *Jurnal Pendidikan Ekonomi (Jurkami)*, 6(2), 123–132. <https://doi.org/10.31932/jpe.v6i2.1449>
- Restiana, Djukri, Indarto, & Hijriyah, U. (2020). *Developing Monopoly Educational Game Application On Xi Grade High School Student's About Cell Teaching Material.*
- Riskiani, M. A. D. P., & Wulandari, I. G. A. A. (2022). Pengembangan Media Permainan Papan Monopoli Berbasis Karakter Peduli Sosial Pada Muatan Materi Ips I Gusti Agung Ayu Wulandari. *Jpd: Jurnal Pendidikan Dasar*. <https://doi.org/10.21009/jpd013.05>
- Rizkiyah, F. L., & Mulyani. (2019). *Penggunaan Media Pop Up Book Untuk Meningkatkan Hasil Belajar Ips Penggunaan Media Pop Up Book Untuk Meningkatkan Hasil Belajar Ips Siswa Kelas Iv Sdn Kajeksan Kecamatan Tulangan Kabupaten Sidoarjo.*
- Rohman, M. G., & Susilo, P. H. (2019). Peran Guru Dalam Penggunaan Media Pembelajaran Berbasis Teknologi Informasi Dan Komunikasi (Tik) Studi Kasus Di Tk Muslimat Nu Maslakul Huda. *Jurnal Pendidikan Dan Pembelajaran*, 8(1).
- Rusijono, R., Jaedun, A., Kartowagiran, B., Ahman, A., Laliyo, L. A. R., & Mam, S. (2020). Developing The Teacher's Social Competency Assessment Instrument In The Fourth Industrial Revolution Era. *Jurnal Penelitian Dan Evaluasi Pendidikan*, 24(2). <https://doi.org/10.21831/Pep.V24i2.29482>
- Safitri, M. (2021). *Keterampilan Abad 21 Dalam Pembelajaran Ips.*
- Setiyanigrum, R. (2020). *Penggunaan Media Pop Up Book Untuk Menghadapi Pembelajaran Era Pascapandemi Covid-19. Prosiding Seminar Nasional Pascasarjana Unnes.*
- Suciati, S., Septiana, I., Fita Asri Untari, M., Studi Pgsd Universitas Pgri Semarang, P., & Sidodadi Timur No, J. (2016). Efektivitas Media Monopoli Berbahasa (Monosa) Dalam Pembelajaran Tematik Integratif Di Sd Kelas Iv. *Mimbar Sekolah Dasar*, 3(2), 136–150. <https://doi.org/10.17509/Mimbar-Sd.V3i2.4253>
- Sugiantoro, Widodo, J., Masrukha, & Priyanto, A. S. (2020). Efektivitas Pembelajaran Ips Berbasis Media Animasi Di Era Pandemi Covid-19. *Prosiding Seminar Nasional Pascasarjana Unnes.*
- Sunarti, Anggraini, D., Sarie, D. P., & Jana, P. (2023). The Effectiveness Of Pop-Up Book Media In Learning

- Reading Skills Of Grade Ii Elementary School. *Cakrawala Pendidikan*, 42(2), 493–506. <https://doi.org/10.21831/Cp.V42i2.50381>
- Wahyudi, D. P. (2020). *The Effectiveness Of Monopoly Game As Media To Enhance 10 Th Graders Speaking In Descriptive Text*.
- Winda, P., Trio Pangestu, W., Matheos, Y., & Malaikosa, L. (2022). *Pengaruh Penggunaan Media Pop-Up Book Terhadap Hasil Belajar Siswa Kelas V Di Sekolah Dasar*.
- Yusuf, B. B. (2018). Konsep Dan Indikator Pembelajaran Efektif. *Jurnal Kajian Pembelajaran Dan Keilmuan*, 1(2).
- Zhong, Q. (2019). Design of game-based collaborative learning model. *Open Journal of Social Sciences*, 07(07), 488-496. <https://doi.org/10.4236/jss.2019.77039>.