



Development of baamboozle-based learning media on Pancasila and Civics subjects in class V

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ABSTRACT

This study aims to produce a product in the form of interactive learning media based on baamboozle in the subject of PPKn. This research is development research using the ADDIE model. This baamboozle-based interactive learning media was developed and then tested for feasibility by material experts, media experts, and linguists, followed by an effectiveness and a practicality test. The results of the feasibility test obtained an average percentage of assessment by material experts of 91 percent, media experts 92 percent, and linguists 77 percent. The practicality of the media was measured using a questionnaire and obtained a score of 93.75 in the very practical category. The effectiveness of the media was obtained from student learning outcomes through the calculation of N-Gain with an average of 0.71 placing the average in the highest effectiveness category, the acquisition of student scores after using baamboozle based interactive learning media is in category very good with an average percentage of 89.15 and the results of the N-Gain calculation with an average of 0.75. It is concluded that baamboozle-based interactive learning media on PPKn are declared feasible, practical, and effective to use as learning media.

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ABSTRAK

Penelitian ini bertujuan untuk menghasilkan produk berupa media pembelajaran interaktif berbasis baamboozle pada mata pelajaran PPKn. Penelitian ini merupakan penelitian pengembangan dengan menggunakan model ADDIE. Media pembelajaran interaktif berbasis baamboozle ini dikembangkan kemudian diuji kelayakannya oleh ahli materi, ahli media dan ahli bahasa, dilanjutkan dengan uji keefektifan dan uji kepraktisan. Hasil uji kelayakan diperoleh persentase rata-rata penilaian oleh ahli materi sebesar 91 persen, ahli media 92 persen, dan ahli bahasa 72 persen. Kepraktisan media diukur dengan menggunakan angket dan memperoleh skor 93.75 dengan kategori sangat praktis. Keefektifan media diperoleh dari hasil belajar peserta didik melalui perhitungan N-Gain dengan rata-rata 0.71 menempatkan rata-rata tersebut pada kategori keefektifan paling tinggi, perolehan nilai peserta didik setelah menggunakan media pembelajaran interaktif berbasis baamboozle berada pada kategori sangat baik dengan persentase rata-rata 89.15 dan hasil perhitungan N-Gain dengan rata-rata 0.75. Disimpulkan bahwa media pembelajaran interaktif berbasis baamboozle pada mata pelajaran PPKn dinyatakan layak, praktis, dan efektif digunakan sebagai media pembelajaran.

Kata Kunci: ADDIE; baamboozle; multimedia interaktif; pendidikan Pancasila dan kewarganegaraan

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INTRODUCTION

The 21st-century learning process requires students to have high learning motivation because they are expected to be able to play a more active role in teaching and learning activities. The development of technology and science has led to various innovations utilized for educational purposes (Banarsari et al., 2023). Academic goals in constructing knowledge emphasize that the progress or success of learners is measured based on the dimensions of understanding each learning topic.

The subject of Pendidikan Pancasila dan Kewarganegaraan (PPKn) is often considered one of the boring lessons for students (Nurmayanti et al., 2025). In fact, PPKn is part of learning that aims to help students understand and apply the values of Pancasila in everyday life (Dewi et al., 2023). Although students often consider it boring, PPKn learning has a fundamental purpose: to instill moral character and awareness.

Keragaman Budaya Indonesiaku material is one of the learning materials studied in class V. This material includes an introduction to various ethnic groups, regional languages, customs, traditional houses, traditional clothing, dance, regional music, and specialties of various regions in Indonesia. This material includes introducing various ethnic groups, regional languages, customs, traditional houses, traditional clothing, dance, regional music, and special foods from various regions in Indonesia. Learning this material aims to make students understand and appreciate cultural diversity as the wealth of the nation, as well as foster an attitude of tolerance and unity in everyday life (Waman & Dewi, 2021).

Pancasila guides the nation's life through values, morals, norms, and ethics as the philosophical foundation and personality of the nation (Bhughe, 2022; Setiawan, 2022). Through PPKn, learners are expected to become people with strong character, love their country, respect differences, and maintain harmony. However, the facts found in some students of SDN 106156 Klumpang learning PPKn are not interesting. Not only that, but this subject is also considered boring and requires too much memorization.

In addition, based on the analysis of the daily scores of students at SDN 106156 Klumpang presented in **Table 1**, it can be seen that students' learning outcomes in PPKn subjects still do not reach the optimal level. This shows a need to improve the quality of learning so that students can achieve the expected completeness value. Strategies that can be applied include using more innovative learning methods, strengthening guidance, and continuous evaluation to support the achievement of better learning outcomes.

Table 1. Daily Score of Class V-B Students

Score	Number of students	Percentage (%)	Description
0-70	1	3,6%	Needs Guidance
71-80	19	67,8%	Good Enough
81-90	8	28,6%	Good
91-100	-	0%	Very Good

Source: Score list of class V teachers of SDN 106156 Klumpang

Based on **Table 1**, several factors contribute to the low learning outcomes of students in PPKn subjects. One of the main factors is the learning process, which the teacher still dominates as the only source of learning, so students have fewer opportunities to be actively involved in learning. In addition, the limited learning tools and media available in the classroom are also an obstacle, considering that the existence

of varied and interactive learning media is essential in improving students' understanding (Nindya & Dafit, 2022). Therefore, efforts are needed to develop learner-centered learning methods and media and provide more adequate learning facilities to improve students' learning outcomes significantly.

The low learning outcomes of students in PPKn subjects are still a problem found in various basic education units. Various factors, such as limited learning media, less varied methods, and a lack of active involvement of students, are the leading causes. Previous research shows that the use of conventional media in PPKn learning has an impact on students' low participation, which directly affects the achievement of student learning outcomes (Mariani, 2022). Another study also found that learning without interactive media tends to make students passive and lose focus quickly (Darman et al., 2024).

The 21st-century learning process also requires students to have high learning motivation because they are expected to be able to play a more active role in teaching and learning activities. Technology development in the 21st century has significantly changed from the production of services to services that add information and knowledge. The development of technology and science has led to many innovations for educational purposes.

Learning media must continue to develop following technological developments (Alfiansyah, 2024; Resti et al., 2024). Modern technology that is currently widely used in learning is microprocessor or computer technology. Many websites or applications have now been launched, such as Canva, Powtoon, Baamboozle, and others, that should be used by teachers to develop teaching media, especially in PPKn subjects (Ndukang et al., 2024; Sahputri et al., 2024).

Baamboozle is a medium that teachers can use to make the attractiveness of students rise in the learning process, and can be actively involved in the learning process that is not boring, and this medium is very suitable so that the expected goals can be achieved (Andriyani et al., 2024; Wardani & Kiptiyah, 2024). Baamboozle is designed as well as possible to attract students' attention so that students feel excited in the learning process, not bored, so that students can do learning activities while having fun. Baamboozle is not just a game (May et al., 2024; Saffitri et al., 2024). Baamboozle is also a valuable tool to measure how well learners understand PPKn material and can be used with other learning resources, such as videos, images, and audio.

Based on the data exposure and previous research, the research must focus on developing interactive learning media based on Baamboozle. This development aims to increase students' effectiveness and involvement in the teaching and learning process. The development process will be systematic and structured, following established research procedures to ensure the quality and usefulness of the learning media produced.

LITERATURE REVIEW

Learning outcomes

Learning outcomes are the abilities obtained by students due to the learning process at school or educational institutions (Mboa & Ajito, 2024). According to Ananda and Hayati in the book "*Variabel Belajar: Komplekasi Konsep*," learning outcomes are obtained through a process or activity carried out consciously to achieve changes, whether in the form of knowledge, skills, or attitudes. Learning outcomes are the ability to do something based on the knowledge, experience, and skills they already have. Thus, the more success learners achieve, the more likely they are to act in the future.

Factors that affect learning outcomes consist of two types: outside and from within the learners. Internal factors include factors that come from the learners themselves, such as health, interest, talent, readiness,

and motivation. External factors include the relationship between learners and their families, the school environment, and the social circle of learners (Alpisah et al., 2023).

The process of evaluating learning outcomes involves several key indicators that are used as a reference to assess the final achievement of learners. These indicators cover three important aspects: knowledge (cognitive), which reflects learners' understanding and thinking about learning materials; attitude (affective), which relates to the development of learners' character, values and emotional responses to learning; and skills (psychomotor), which assesses practical abilities and the application of skills in various contexts. These three aspects become the main guidelines for educators in analyzing the development of learners' learning processes comprehensively and thoroughly.

Pendidikan Pancasila dan Kewarganegaraan (PPKn)

Pendidikan Pancasila dan Kewarganegaraan (PPKn) is the ideological education of the Indonesian nation. It aims to form good citizens, understand the rights and obligations of citizenship, love the country, and have an Indonesian national spirit (Akhyar & Dewi, 2022). PPKn can be taught to schoolchildren starting from the elementary level. It prioritizes the growth of students' values, morals, attitudes, and behavior.

The purpose of PPKn in elementary schools is to equip and strengthen basic knowledge and skills about the good relations of Pancasila Indonesian citizens with other citizens and fellow Indonesian citizens. The precepts of Pancasila have a role in shaping learners' personalities, ranging from social justice, which emphasizes the importance of justice in everyday life, to belief in God Almighty, which teaches a religious attitude.

PPKn is increasingly relevant when facing the challenges of globalization because it helps learners acquire a strong national identity and face changes without losing their national values. Therefore, to implement PPKn in class V SD effectively, relevant materials and learning methods that are in accordance with students' characteristics are needed.

Interactive Learning Media

Educational methods based on information and communication technology are known as interactive learning media. Teaching and learning activities have several supporting parts, including learning media. Media is anything that can be sensed and functions as an intermediary/means/tool for the communication process of the teaching and learning process (Fadilah et al., 2023). Learning media is a tool used to convey the content of learning materials that can stimulate students to participate in the learning process (Daniyati et al., 2023)—learning media functions as a tool and as a link between teachers and students by delivering lessons interestingly and interactively, to meet different learning needs. There are various types of learning media available.

Media use in the learning process can arouse students' interest and motivation to learn, reduce or avoid verbalism, generate regular, systematic reasoning, foster understanding, and develop values in students. Media helps teachers and students communicate, making learning more interactive, engaging, and easily understood. Teachers can also provide learning materials by utilizing interactive media to increase students' interest in PPKn subjects (Seftriyana & Megasari, 2025).

The use of media can reduce verbalism, encourage systematic reasoning, and simplify complex concepts to make them simpler and more accessible to learners. Interactive learning allows learners to think critically, speak up, and cooperate with classmates. As learners feel more involved and in control of the learning process, this can increase their motivation and interest. Classroom technology, such as interactive boards or interactive learning software, is one example of interactive learning (Muslih & Roslaeni, 2024).

Bamboozle

Bamboozle is an interactive learning platform that is increasingly popular among teachers and learners, allowing teachers to create fun and effective interactive quizzes that learners can access individually or in groups. This Bamboozle game can be used as a learning medium because of the availability of one core game, quizzes, which aim to make learning more fun and motivate students to be excited when learning (Nisvia & Pratiwi, 2024).

Bamboozle is relatively easy for students or teachers because users do not need to download the application. Bamboozle works simply by opening the web page and creating the game or quiz you want to make; after that, the teacher can immediately use it. Bamboozle also does not require students as quiz participants to access through their respective devices. Instead, the game process can only be done using the teacher's device. This media is played in groups, where each group chooses a number on the screen that contains questions that must be answered.

Bamboozle website initial view

Display of game types according to the topic

Group number selection display

Final view of the game

Figure 1. Bamboozle website content display
Source: Research 2025

The use of Bamboozle is widely recommended by researchers who have conducted research by being able to consider the advantages, such as: 1) Accessing Bamboozle media without having to create an account; 2) There are various questions; 3) Using Bamboozle media can be used at every level of education in Indonesia; 4) Provides a new experience for students to discuss in groups, with fun in Bamboozle; 5) Easy to access; 6) Can be used as a medium for independent learning; and 7) Can be accessed via laptop or cellphone (Amalinda, 2024).

Based on some of the opinions above, it can be concluded that Bamboozle is an interactive learning medium with many advantages. Bamboozle can be used via a laptop or a mobile phone for various levels of education without creating an account. In addition, several interesting questions that can be used for independent learning as well as fun and collaborative group discussions can be created through this platform. Bamboozle is informative and attractive, allowing teachers to create their games, making it a versatile tool for ice-breaking and fun learning. Bamboozle is suitable for teamwork and can be used by everyone, not just in formal schools.

METHODS

Bamboozle-based interactive learning media development uses a research and development (R&D) approach model. This development research uses ADDIE steps, intending to develop Bamboozle-based interactive learning media that are valid and feasible for students to use as learning media. ADDIE

development steps are as follows: 1) Analysis; 2) Design (planning); 3) Development; 4) Implementation; and 5) Evaluation (Feedback) (Hidayat & Nizar, 2021).

The subjects in this study were divided into two, which are expert validator test subjects, consisting of material expert validators who assess the suitability and depth of the material, media expert validators who evaluate the visual aspects, appearance, and readability of the media, and linguist validators who review the clarity and accuracy of language use in learning media. While the subject of the product trial was class VB students of SDN 106156 Klumpang with a total of 26 students to test the effectiveness of the media and the use of media and 3 class V teachers of SDN 106156 Klumpang played a role in providing feedback related to the usefulness and implementation of media in the learning process in the classroom.

Data analysis in Baamboozle-based interactive learning media development research uses quantitative descriptive analysis. Data were collected through expert validation (material, media, and language expert validators), and questionnaires/surveys were distributed to educators (as a teacher response). In addition, field trial data were collected using tests in the form of pre-tests and post-tests. Pre-test activities were initial tests before experiments were carried out on research samples. At the same time, post-tests were carried out for experimental tests to obtain results after being given treatment using Baamboozle-based interactive learning media in the teaching and learning process. The amount of improvement before and after learning is calculated by the normalized Gain formula developed by Hake in a paper entitled "Analyzing Change/Gain Scores" as follows:

$$gain = \frac{skor\ posttest - skor\ pretest}{100 - skor\ pretest}$$

Table 2. Classification of N-Gain Score

Score	Classification
$0.7 \geq gain$	High
$0.3 \leq 0.7$	Medium
$gain < 0.3$	Low

Source: Hake, 1999

RESULTS AND DISCUSSION

The design used in this study is the ADDIE research design. This study uses test instruments and questionnaires given before and after the implementation of learning using Baamboozle-based interactive media in PPKn subjects on the material of Keragaman Budaya Indonesiaku in Class V. The validation process with material experts took place during 2 (two) stages. The assessment results in the form of scores on each point are used as reference material for revising the product. After the product has been designed, it will be returned to the material expert to be assessed and analyzed for errors or shortcomings.

The results of validating the components on the quality of Baamboozle-based interactive learning materials can be seen in **Table 3**.

Table 3. Results of Material Expert Assessment

No	Assessment Aspect	Stage	
		1	2
1.	The material presented in the Baamboozle-based interactive learning media is aligned with the Learning Outcomes	4	5
2.	The material presented in the Baamboozle-based interactive learning media is clear	4	5
3.	The material presented in the Baamboozle-based interactive media is aligned with the learning objectives to be achieved	4	5
4.	The material presented in the learning media is packaged coherently	3	4
5.	The selected questions are from the learning material	4	4
6.	The material contained in the Baamboozle-based interactive learning media is important material to be taught to students	4	5
7.	The material contained in the Baamboozle-based interactive learning media is appropriate for the daily lives of students	3	4
8.	The material taught in Baamboozle-based interactive learning media is easy to understand	3	4
9.	With the existence of Baamboozle-based interactive learning media, it can support the increase in motivation and interest in learning for students on the material of Keragaman Budaya Indonesiaku	5	4
10.	The use of interactive learning media based on Baamboozle can increase students' knowledge and understanding of the material of Keragaman Budaya Indonesiaku	3	5
11.	The sentences used in the questions are effective	3	5
Total		40	50
Percentage		73%	91%
Criteria		L	SL

Source: Research 2024

The validation process with media experts is carried out through two systematic stages. The first stage is conducted after the initial design of the learning media has been completed, where media experts provide an assessment based on the instruments that have been prepared. This assessment is a quantitative score for each indicator covering important aspects of learning media quality, such as visual design appearance, interactive features, ease of use, and material suitability. The scores obtained are used to improve the learning media products developed. After the improvements were made based on the suggestions and input in the first stage, the revised product was sent back to the media expert for assessment in the second stage.

This stage aims to ensure that errors or shortcomings found previously have been corrected and to evaluate the overall quality of the media more comprehensively. The results of this validation reflect the feasibility level of the Baamboozle-based interactive learning media components displayed as a score

recapitulation in **Table 4**. The data becomes a reference in determining how much the media can be implemented in the learning process.

Table 4. Results of Media Expert Assessment

No	Assessment Aspect	Stage	
		1	2
1.	Baamboozle-based interactive learning media design display is based on the characteristics of students	4	4
2.	Baamboozle-based interactive learning media can attract students' interest in learning	3	5
3.	The display of features on Baamboozle-based interactive learning media is easy to use	3	5
4.	The use of color combinations in the design of learning media is appropriate	5	5
5.	Accuracy in choosing appropriate images to support questions	4	5
6.	The selected questions are based on the representative images available	3	4
7.	The selected questions are based on the representative images available	4	5
8.	The sound rhythm in Baamboozle learning media does not interfere with users while working on questions	2	4
9.	The text used in the learning media is appropriate	3	4
10.	The size of the text used is appropriate	3	4
11.	The neatness of the text and images presented is appropriate	2	5
12.	The text can be read clearly	4	5
13.	Baamboozle-based interactive learning media can be used on various devices	3	5
14.	The number of questions in Baamboozle-based interactive learning media does not make participants bored	4	4
15.	Baamboozle-based interactive learning media can facilitate teachers in delivering material	5	5
Total		51	69
Percentage		68%	92%
Criteria		L	SL

Source: Research 2024

The validation process with linguists was conducted in four stages, although only one stage involved formally filling in the validation questionnaire. These stages include the initial consultation process, reviewing the learning media script, providing verbal and written input, and the final stage in the form of filling out an assessment questionnaire after the media is considered to meet the initial criteria. The assessment results are presented in quantitative form in scores on each linguistic aspect, such as the accuracy of language use, message clarity, sentence structure, diction choice, and conformity with reasonable and correct Indonesian language rules. This assessment is the basis for revising the product to meet the linguistic standards in learning media.

This assessment aims to ensure that the language used in the interactive learning media is based on communicative, effective, and educative language principles. Table 5 shows the complete results of the linguist assessment process of the Bamboozle-based interactive learning media components, which contains details of the scores for each indicator that has been assessed.

Table 5. Results of the linguistic assessment

No.	Assessed Aspect	Assessment Indicator	Score
1.	Conformity to Indonesian Language Rules	Language by Ejaan yang Disempurnakan (EyD)	4
		Grammatical accuracy	4
		There is no double interpretation of the words used	4
2.	Communication and Interactive	The language of the material presentation is easy to understand	4
		The suitability of the language used with the ability of elementary school students	4
		The language used is communicative	3
Total			23
Percentage			77%
Criteria			Layak

Source: Source, 2024

The evaluation stage in the ADDIE development model is the basis for validating Bamboozle-based learning media by experts. This assessment includes aspects of content, visual appearance, interactivity between users, and language suitability to ensure that the learning media developed is effective for elementary school users in the context of learning and supports the achievement of learner competencies. Based on the experts' evaluation results, several revisions were made to improve the media design following the suggestions given. **Figure 2** presents a comparison between the media design before and after the evaluation process by the experts.

Before Revision

After Revision

Figure 2. Display of learning media before and after

Source: Research, 2025

The completeness of student learning outcomes in the cognitive domain is further explained in percentages before and after using Bamboozle-based interactive media. The percentage of students' learning outcomes that are complete based on pretest scores can be seen in the following calculation:

$$\text{Persentase siswa yang tuntas} = \frac{\text{banyaknya siswa yang tuntas}}{\text{banyak siswa keseluruhan}} \times 100\% = \frac{7}{26} \times 100\% = 26,9\%$$

The percentage of the results of students who are complete based on the post-test score can be seen in the following calculation:

$$\text{Persentase siswa yang tuntas} = \frac{\text{banyaknya siswa yang tuntas}}{\text{banyak siswa keseluruhan}} \times 100\% = \frac{26}{26} \times 100\% = 100\%$$

Discussion

The initial stage before the field trial was to test the prerequisites of the test instrument through expert validators of the learning outcomes test instrument and item analysis of the test instrument. The results of expert validator testing of learning outcomes test instruments in the cognitive domain obtained a total score of 53, with a percentage of 96.3%, which was included in the “Very Feasible” category, even though there were still some notes and suggestions for the instrument. This indicates that the substance of the questions follows the indicators of competency achievement and can measure the thinking ability of students comprehensively (Astiwi et al., 2020).

In the affective and psychomotor aspects, the validation results also show a high value, namely a score of 48 with a percentage of 96%, which is also categorized as “Very Feasible”. This means that the instrument has represented the indicators of students' attitudes and skills well and comprehensively. Validation of affective and psychomotor aspects is critical, especially in social studies learning that emphasizes the development of social values, empathy, and collaborative skills (Ngasmarani et al., 2024). The context of interactive learning media such as Baamboozle strongly supports the achievement of affective and psychomotor goals because it can create a pleasant learning atmosphere, facilitate social interaction between students, and stimulate positive emotional responses to the material being studied (Rizal & Rosiyanti, 2024). Interactive learning media can also increase students' learning effectiveness and motivation when taking lessons (Rosyiddin et al., 2023). In addition to the media, the proper method also influences creating an effective and enjoyable learning atmosphere (Nasikin et al., 2025).

Using educational game-based media, such as Baamboozle, also allows teachers to integrate activity-based evaluation to assess cognitive, affective, and psychomotor aspects more contextually. This media can be used as a formative and summative assessment instrument that attracts and motivates students to engage in learning actively and as a means to improve the quality of assessment that is more holistic and learner-centered (Mariani, 2022). The instruments that have been validated and developed not only meet theoretical feasibility standards but are also supported by innovative learning approaches relevant to learners' needs in the digital era.

The next stage is the item analysis test using the ANOVA V4 application, namely the item validity test, reliability test, test level of test difficulty, and differentiation test. The item validity test stated that 15 items were in the “Valid” category and 10 items were in the “Invalid” category. This aligns with research conducted by Abdillah & Hikmah (2024). This finding shows that, as formulated in the learning indicators, namely the ability to identify and present information about social, economic, cultural, ethnic, and religious diversity in the local province, and understand the relationship between this diversity and the characteristics of space. The validity of the questions reflects the suitability between the content of the items and the basic competencies that students are expected to master in social studies learning (Magdalena et al., 2021; Rossmalia et al., 2024).

The results of the instrument reliability test show a coefficient of 0.93, which is included in the “very high” category. This value indicates that the instrument has excellent internal consistency and is suitable for learning evaluation (Zakiah & Jamillah, 2021). Analysis of the level of difficulty of the items shows that there are four items (16%) that are included in the “easy” category, 17 items (68%) are in the ‘medium’ category, and four items (16%) are in the “difficult” category. The ideal difficulty index is in the range of 0.25 to 0.75, reflecting questions of moderate quality and the ability to measure the ability of students

effectively (Lestari et al., 2023). Meanwhile, the test of differential power showed that four items (16%) were in the “poor” category, five items (20%) were in the “fair” category, nine items (36%) were in the ‘good’ category, and seven items (28%) were in the “excellent” category. High differentiation indicates the ability of the question to distinguish students who have a high and low level of mastery of the material.

The results of the feasibility of Baamboozle-based interactive learning media products, based on the overall score given by expert validators above, are declared feasible for use in the field. Similar products that have been developed in other studies related to the development of Baamboozle-based learning media obtained results from material expert validators of 96.0% with a very feasible category and results from media expert validators of 98.0% with a very feasible category (Fitriani et al., 2022).

The effectiveness of Baamboozle-based interactive learning media in improving students' learning outcomes has been proven by comparing the results of the pretest and post-test conducted during the learning process. The pretest was conducted before using interactive media, while the post-test was conducted after applying Baamboozle media. The analysis using the N-Gain test showed a significant increase with an average N-Gain of 0.7155, which is classified in the high category. Before using the media, only 26.92% of students achieved learning completeness, while after using Baamboozle media, the completeness rate increased to 100%. This increase reflects the effectiveness of Baamboozle media in helping students understand learning materials, especially in PPKn subjects on Keragaman Budaya Indonesiaku in class V (Ramdani et al., 2024).

This finding is in line with the results of research showing that the use of Baamboozle can significantly improve students' learning outcomes, as indicated by an increase in the average score of students and the results of statistical tests that show a significance value below 0.05 (Sari et al., 2024). Another study also revealed that this media is effective as an evaluation tool in learning mathematics and contributes to increasing students' motivation and learning outcomes, with N-Gain values in the moderate category (Walidaina et al., 2024). Considering the empirical findings and the underlying theory, it can be concluded that using Baamboozle-based interactive learning media effectively improves students' learning outcomes, especially in PPKn learning at the primary school level.

The effectiveness of this interactive learning media is also supported by the results of research that shows the effectiveness of Baamboozle game media on the average learning outcomes of students in cycle I of 71.5% and the average value of learning outcomes in cycle II of 87.5%, which is a significant increase in the learning process in the classroom (Gultom et al., 2023). Supported by the results of other studies that show an increase in student learning activity in cycle I, with a percentage of 63.8%, with an average score of 77, and the results in cycle II, with a percentage of 86.1%, with an average score of 83 (Dani & Purwandari, 2024). The overall increase in learning activity occurred after using Baamboozle learning media.

CONCLUSION

Products in the form of Baamboozle-based interactive learning media in PPKn subjects in class V of SD Negeri 106156 Klumpang have feasible results to become final products that can be implemented for users. Baamboozle-based interactive learning media in PPKn subjects for SD Negeri 106156 Klumpang class V students is a practical media used during the learning process. Future research can consider expanding media trials in schools with different characteristics and implementation over a more extended period. This approach is expected to provide a more comprehensive picture of the effectiveness of the media. Further development that integrates interactive features with specific learning models also has the potential to improve the quality and relevance of the media to learners' needs.

AUTHOR'S NOTE

The authors declare that there is no conflict of interest related to the publication of this article and confirm that the data and content of the article are free from plagiarism.

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