

Digenesis: Flipbook-Based Teaching Materials on Civics Education for Grade IV Elementary School

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ARTICLE INFO

Article history:

Received March 20, 2024

Accepted June 31, 2024

Available online July 25, 2024

Kata Kunci:

Pengembangan, bahan ajar digital, flipbook, hasil belajar, PPKn

Keywords:

Development, digital teaching materials, flipbooks, learning outcomes, Civic Education



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ABSTRAK

Penggunaan bahan ajar yang kurang interaktif dan tidak memaksimalkan penggunaan teknologi menjadi sebuah masalah yang dapat memengaruhi hasil belajar siswa. Penelitian ini bertujuan untuk menghasilkan bahan ajar digital berbasis flipbook pada mata Pelajaran PPKn kelas IV Sekolah Dasar yang praktis, layak, efektif, serta dapat meningkatkan hasil belajar siswa. Implikasi pada penelitian ini adalah proses pembelajaran menjadi lebih kreatif dan inovatif karena adanya bahan ajar digital yang melibatkan teknologi pada penggunaannya. Metode penelitian yang digunakan dalam penelitian ini yaitu metode Research & Development (R&D) dan dikembangkan dengan model ADDIE. Subyek yang dilibatkan diantaranya 1 ahli materi, 1 ahli media, 1 guru, dan 22 siswa kelas IV. Teknik pengumpulan data yang digunakan yakni teknik tes yang berupa pretest dan posttest, dan teknik non tes yang berupa hasil observasi, wawancara guru, dan angket. Sedangkan, teknik analisis data dilakukan dengan uji kepraktisan dan uji N-Gain. Hasil validasi bahan ajar oleh ahli materi sebesar 90,6% dan ahli media sebesar 95% menunjukkan bahwa bahan ajar "DIGINESIA" telah memenuhi kriteria sangat layak untuk digunakan sebagai penunjang pembelajaran. Berdasarkan hasil pretest dan posttest diketahui bahwa bahan ajar "DIGINESIA" efektif untuk meningkatkan hasil belajar peserta didik yang ditunjukkan dengan hasil peningkatan rata-rata sebesar 45,8 dan hasil uji N-Gain diperoleh sebesar 0,73 dengan kategori tinggi. Angket respon yang disebarkan kepada guru dan siswa memperoleh hasil 100% dan 97,7% dengan kategori sangat positif. Dari hasil tersebut dapat disimpulkan bahwa bahan ajar "DIGINESIA" layak, praktis, efektif, serta dapat meningkatkan hasil belajar siswa kelas IV pada mata pelajaran PPKn.

ABSTRACT

The use of teaching materials that are less interactive and do not maximize the use of technology is a problem that can affect student learning outcomes. This study aims to produce digital teaching materials based on flipbook in Civic Education class IV elementary school subjects that are practical, feasible, effective, and can improve student learning outcomes. The implication of this research is that the learning process becomes more creative and innovative because of the digital teaching materials that involve technology in its use. The research method used in this research is the Research & Development (R&D) method which was developed with the ADDIE model. The subjects involved included 1 material expert, 1 media expert, 1 teacher, and 22 fourth grade students. The data collection techniques used are test techniques in the form of pretests and post-tests, and non-test techniques in the form of observation results, teacher interviews, and questionnaires. Meanwhile, the data analysis technique was carried out by practicality test and N-Gain test. The results of the validation of teaching materials by material experts of 90,6% and media experts of 95% show that the teaching materials "DIGINESIA" have met the criteria very feasible to be used as learning support. Based on the results of the pretest and post-test, it is known that the teaching materials "DIGINESIA" are effective for improving student learning outcomes as indicated by the results of an average increase of 45,8 and the N-Gain test results obtained of 0,73 with a high category. The response questionnaires distributed to teachers and students obtained 100% and 97,7% with very positive categories. From these results, it can be concluded that the teaching material "DIGINESIA" is feasible, practical, effective, and can improve the learning outcomes of grade IV students in the Civic Education subject.

1. INTRODUCTION

Education is an arrangement and purposeful work to make a learning atmosphere and educational experience with the goal that understudies effectively foster their capability to have strict otherworldly strength, knowledge, honorable person, poise, character, and abilities required without anyone else and society (Fransiska et al., 2023; Ichsan, 2021). Education is closely related to the learning process. Learning is the process of educators delivering information to students. A learning can be categorized as successful if an educator can achieve learning objectives well and can be used as a benchmark in determining the competence of students, well as to understand the learning difficulties of students in the classroom (Lase & Sudarma, 2023; Marlina et al., 2019). The government issued the Minister of of Education, Edu Culture, Research, and Technology Regulation No. 7 of 2022 concerning Content Standards at the Early Childhood Education level, Basic Education level, and Secondary Education level as one of the efforts to achieve the learning process. At the Basic Education level, there are several subjects that must be studied, one of which is Civic Education.

One of the compulsory subjects contained in the Merdeka Curriculum, namely Civic Education. The existence of this subject aims to foster the values of the Pancasila ideology in students, as well as develop citizenship attitudes which include responsibility, self-confidence, and also commitment as citizens (Aprillia et al., 2022; Kadek & Kartika, 2021). Pancasila, which is the basis of the Indonesian state, certainly plays an important role in regulating the life of the nation and state. This is where the task of an educator lies in providing guidance and education to students associated with the values contained in Pancasila. Through this Civic education, students can form a spirit of nationalism (Aprillia et al., 2022; Wijayanto J. & Marzuki, 2018). The education system is being guided by the development of the 21st century to implement a learning process that is geared toward the advancement of scientific and technological developments. This learning process is characterized by modifications to communication media, technology, and curriculum (Hidayat et al., 2023; Rahayu, Iskandar, & Abidin, 2022). Based on this, the utilization of interactive teaching materials in learning is very necessary and must be optimized. The utilization of this teaching material can attract students in listening to the material presented and arouse the enthusiasm of students, so it can uphold the accomplishment of learning objectives well (Mulyati et al., 2021; Ulandari & Sudatha, 2022).

In a learning process there are three main elements, including students, educators, and learning resources. In order for educators to easily explain the material to students, interactive teaching materials are certainly very necessary. Usually, teaching materials are printed in the form of books containing subject matter that has the aim that students can learn independently (Amanda et al., 2023; Fitriani et al., 2022). However, along with the development of science and technology, teaching materials can be developed in digital form which is presented with the help of electronic devices, and is commonly known as digital teaching materials (Firdaus et al., 2023; Sulistiani, S., Kartimi, K., & Sahrir, 2022). The use of teaching material will support the instructing and educational experience, so teaching material must be prepared with good language, according to learning objectives, and in accordance with child development. One form of digital teaching material is digital books. A digital book is a book designed in digital or electronic form with practicality when using it (Francisca et al., 2022; Setianingrum et al., 2022; Widari et al., 2021). Some of the advantages of digital books are that they can present learning material in the form of sentences, videos and images, are easily accessible anywhere and anytime, are designed with colors and animations that attract the attention of students, and can increase student learning activities.

Based on observations that have been made, researchers directly observe the teaching and learning process at SD Negeri 2 Kedungrejo. The results of the observations revealed that some students had difficulty in understanding the material in Civic Education. This is reinforced by the outcomes of interviews with educators, namely students learn during the process are difficult to focus on for a long time, when the educator explains the material there are some students who do not pay attention, there is a lot of reading and memorization makes students feel bored, and the use of printed teaching materials that are less interactive. This is the cause of students' learning outcomes tending to be lower. The data is supported by using the Civic learning outcomes of IV grade students of SD Negeri 2 Kedungrejo which shows that only 8 out of 22 (36%) students have completed the material on "Negaraku Indonesia". The urgency of this research raises the problems encountered, namely the need to improve the quality of Civic education and the development of interactive teaching materials to overcome existing problems. So that, through this research it is hoped that it can make it easier for students to understand the material, then it can also improve student learning outcomes.

The development of teaching materials in the learning experience is used in order to streamline the process of interaction and communication between educators and students in a classroom learning process. Along with the development of technology, educators can utilize it as a means of developing teaching materials in the form of attractive and interactive digital books (Hariyati & Rachmadyanti, 2022;

Ivanović et al., 2013). One application that can be used in creating digital book designs is Canva. Canva is an application that has a scope of graphic design that makes it easy for everyone to create their own designs (Hingide et al., 2021; Putri et al., 2023). After being designed through the Canva application, the digital book can be made into a flipbook model using the Heyzine website. The development of this digital book is a smart solution to present a more interesting, communicative, and interactive learning atmosphere in the classroom.

According to the findings of previous research, digital books are considered as supporters of an educator in a learning process, because they can be used anywhere and anytime. In addition, this digital book can increase students understanding by reading the material, watching videos, and observing the images in it (Aulia et al., 2021; Yulaika et al., 2020). The findings in other studies also state that the use of this digital book can improve student learning outcomes (Qouri & Zulherman, 2023). Then, in another study, it was revealed that the use of the Heyzine website in making this digital book can increase the attractiveness of students, because when reading the digital book, students seem to be opening a physical book because it has an animation effect where when turning pages it will feel like opening a physical book and is supported by sound effects such as turning paper in a book (Saraswati et al., 2021). However, in these studies, the evaluation or quiz questions have not been developed creatively and innovatively. So this is an research gap that encourages researchers to carry out further development.

Based on this background, researchers conducted research to develop teaching materials in the form of a flipbook-based Digital Book of Negaraku Indonesia (DIGINESIA) to improve the learning outcomes of IV grade students of SD Negeri 2 Kedungrejo in Civic subjects, especially the material of Negaraku Indonesia. The goal of this study is was to test the feasibility and effectiveness of the items that have been developed. The development of DIGINESIA teaching materials utilizes the Canva application in designing and also the Heyzine website to create flipbooks. This digital book contains material, audio, video, infographics, and also quizzes as an evaluation ion of student learning outcomes. The material is not only presented in full text, but also with animated images that can make students interested. Then, there are infographics that can be seen by pressing the landing button. Finally, there is a quiz through the Wordwall platform that is wrapped like a game, making students feel challenged when working on the questions one by one. This quiz can be accessed by scanning the barcode or pressing the button. These things become a novelty of the research and development carried out. This teaching material is expected to make it simpler for students to understand the material and also facilitate the teaching and learning process. Furthermore, this research and development is also expected to benefit educators. innovating and providing an overview in conducting creative and innovative learning using interactive teaching materials, so that educators are able to carry out Civic learning to the maximum and achieve the expected goals.

2. METHOD

The sort of method utilized in this research is Research & Development (R&D) research, with this method, researchers will later validate, develop, and produce flipbook-based digital book teaching materials to further develop student learning outcomes in Civic Education, especially the material of my country Indonesia. This research was conducted at SD Negeri 2 Kedungrejo which is located at Pucung, Kedungrejo Village, Nguntoronadi District, Wonogiri Regency. This research also requires several subjects, including students, educators, and a team of experts (material and media experts). The number of learners involved in this study comprised of 22 IV grade students. Of these, researchers divided into 2, namely small groups and large groups. The small group consisted of 6 students and the large group consisted of 16 students. The model applied by researchers in this study is the ADDIE model. This model has 5 stages, namely analysis, design, development, implementation, and evaluation (Sugiyono, 2019). The first stage carried out in this study is the analysis stage, which at this stage the researcher identifies the results of observations, teacher interviews, and questionnaires. This analysis was carried out to determine the characteristics of students, the curriculum used, student needs, facilities, and infrastructure at SD Negeri 2 Kedungrejo.

The second stage is the design stage. At this stage, researchers compile and design products. Furthermore, the third stage is the development stage. After the product is designed, the researcher develops it according to the design that has been made. Researchers make products with materials that have been collected in accordance with the manufacture of teaching materials. Then, the researcher also checks and corrects the teaching materials that have been made before being validated, if it is finished then the product is ready to be submitted to the expert validator. In this case, material and media experts fill out a validation sheet that has been prepared by researchers in the form of a Likert scale. The instrument score from the expert validation results can later be used to determine the feasibility of the product being tested. Table 1 and Table 2 present the research instrument grids.

Table 1. Material Expert Instrument Grid

No	Aspect	Indicator
1	Content Appropriateness Aspect	a. Suitability of material with learning outcomes. b. Suitability of material with learning objectives c. Suitability of material with students' level of thinking. d. Suitability of questions with learning objectives learning objectives
2	Language Appropriateness Aspect	a. Language suitability with student characteristics. b. Language use is in accordance with PUEBI rules. c. Language used is communicative and easy to understand
3	Presentation Appropriateness Aspect	a. Image suitability with material. b. The material can improve understanding and ability thinking ability of students. c. There is a glossary.

Table 2. Media Expert Instrument Grid

No	Aspect	Indicator
1	Material Aspects	a. The suitability of the title with the material presented. b. The learning outcomes and learning objectives displayed in the learning media are clear. c. The suitability of the material with the learning video
2	Language Aspects	a. Language suitability with user characteristics b. The language used is clear and easy to understand
3	Display Aspects	a. Appropriateness of font shape and size b. Sentence structure is easily understood by users c. Appropriate color combination d. Images and videos can be seen clearly. e. Placement of menu layout. f. Quiz can be operated properly
4	Usage Aspects	a. Learning media is easy to use by teachers and students

The fourth stage is the implementation stage. After the developed product received the results of the feasibility test through the validity test from the expert, the researcher conducted product trials in small groups and large groups. This stage aims to show the practicality of the products that have been developed. Initially, this product was used in the learning process in small groups. After learning, educators and students were approached to finish up a response questionnaire to the use of "DIGINESIA" teaching materials. Furthermore, the results of the response questionnaire analyzed and if there are suggestions can be considered as material for revision and evaluation of products that have been tested. Then, the product was also tested in large groups. In the large group, educators and students also fill out a response questionnaire which will be analyzed later. The last stage is the evaluation stage. At this stage, after learning using "DIGINESIA" teaching materials is completed, students are asked to work on evaluation questions. This aims to figure out the effectiveness and feasibility of the recently developed product.

This study used 2 data collection techniques, namely test and non-test techniques. For test techniques, researchers used question instruments in the form of pretest and post test questions totaling 15 questions. Then, for non-test techniques using interviews, observations, and questionnaires. The results of the teacher and student response questionnaires were used to conduct the practicality test. To figure out the feasibility of the product developed, researchers used data analysis of the assessment results from materials and media expert validators. Then, to determine the effectiveness of the product, researchers used data analysis in the form of the N-gain test based on the pretest and post test scores of students in the large group test.

3. RESULT AND DISCUSSION

Result

The first stage carried out is the analysis stage. At this stage, researchers analyzed the problems found in schools using the results of observations and interviews with related educators. Based on the

results of the analysis, several problems were found, including students being difficult to focus on learning for a long time and getting bored easily, this is due to monotonous learning and the use of teaching materials that are less interactive. Educators also still refer conventional learning and have not fully utilized existing technology in carrying out the learning process, so that students do not take an active part. In addition, the learning outcomes of grade IV students still relatively low, because only 8 out of 22 (36%) students have met the KKM. With this, researchers developed teaching materials in the form of a flipbook-based digital book called "DIGINESIA". This digital book contains Civic subject material, especially the chapter "Negaraku Indonesia" and can later be accessed via smartphone or laptop. Then, researchers used the reference of the results of the teacher and student needs questionnaire to make the design and design of the product to be developed.

The second stage is the design stage. Researchers design digital book products that will be made. Of course, this digital book is designed according to the learning outcomes and learning goals that will be accomplished in Civic subjects, especially the material "My Country Indonesia". The digital book contains materials as text, audio, images, video, and also infographics. Then, at the end there is a quiz that students can do as an evaluation tool. This quiz uses the Wordwall platform which can make students interested because it is packaged like a game. Digital books are made using the Canva application and inserted on the Heyzine website to make digital books into digital flipbooks. In addition, the design of this digital book also follows the flowchart that was previously prepared by the researcher.

The third stage in this research is the development stage. At this stage, the digital book product development process is carried out by collecting several materials obtained from several relevant material sources, such as teacher books, student books, and others. All materials such as text, images, audio, video, and infographics included the digital book, then designed through the Canva application. This design adjusted to the characteristics of students so that the content in the digital book can be easily understood by students. After the digital book design is complete, the results are entered into the Heyzine website to be converted into a flipbook. The final product will be stored on the website and later shared with students in the form of a link or barcode. Learners and educators can access this digital book through a smartphone or laptop by requiring an internet network. Part of the flipbook-based "DIGINESIA" teaching material consists of, cover page in [Figure 1](#); preface and table of contents in [Figure 2](#); book instructions, learning outcomes, and learning objectives in [Figure 3](#).



Figure 1. Cover Page



Figure 2. Preface and Table of Contents

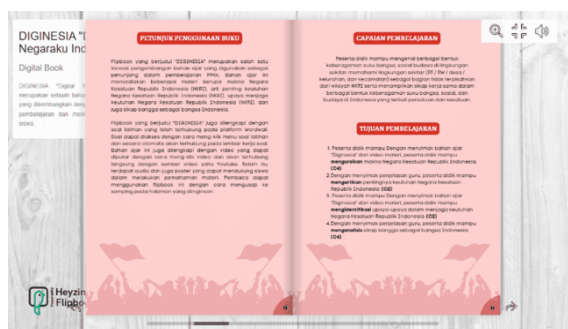


Figure 3. Book Instructions, Learning Outcomes, and Learning Objectives

After completing the development of the product, the researcher will validate the product to expert validators who are relevant in their fields. For material experts, researchers chose Civic lecturers in the Elementary School Teacher Education study program, and for media experts, researchers chose art subject lecturers in the Elementary School Teacher Education study program. This aims to identify the feasibility of the product before it is implemented. The table of teaching material feasibility test results can be seen in Table 3.

Table 3. Feasibility Test Results of Teaching Materials

Respondent	Percentage	Criteria
Material Experts	90.6%	Very Feasible
Media Experts	95%	Very Feasible

The data in Table 3 shows the results of the validation of teaching materials conducted by material experts and media experts. The material validation stage was carried out once with a score of 90,6% categorized as "very feasible". The assessment of the material expert stated that the competence, content, language, and presentation of the "DIGINESIA" teaching materials were very feasible to be tested. Then, the media validation stage was carried out once with a score of 95% categorized as "very feasible". The assessment of the media experts stated that the appearance, material, language, and usage aspects of teaching materials were also very feasible to be tested.

The fourth stage is the implementation stage. In the implementation stage, researchers tested the practicality of the product. In the initial trial, the product was tested for a small group of 6 students. To select the 6 students, purposive sampling was used, where the sample was selected based on a number of factors in accordance with predetermined criteria. The sample used in the small group consisted of two students from the top rank, two students from the middle rank, and two students from the lowest rank.

After the initial trial, the next step was to test the product on a large group consisting of 16 IV grade students of SD Negeri 2 Kedungrejo. For sampling in this large group trial using the saturation method, where all members of the population in the study were included as samples. After conducting the learning process using the teaching materials that have been developed, researchers asked teachers and students to fill out a response questionnaire to the "DIGINESIA" teaching materials. The table of the results of the large group teacher and learner response questionnaire can be seen in Table 4.

Table 4. Results of Teacher and Learner Response Questionnaires to Teaching Materials "DIGINESIA"

Respondents	Percentage	Information
Teacher	100%	Very Positive
Students	97.7%	Very Positive

Table 4 shows that the results of teacher and learner responses are categorized as "very positive" because they scored more than 75%. This shows that the teaching material "DIGINESIA" is considered practical in its use and facilitates the conveyance of material in the educating and educational experience.

The fifth stage is the evaluation stage. This evaluation stage aims to determine the effectiveness and feasibility of the products that have been developed. After conducting product use trials in large groups, students evaluate learning through pretests and posttests. The pretest was conducted before the use of "DIGINESIA" teaching materials, while the posttest was conducted after the use of "DIGINESIA" teaching materials. For students' cognitive learning outcomes in the large group trial can be seen in Table 5.

Table 5. Large Group Cognitive Learning Outcomes

Action	Average	Highest Score	Lowest Score	Average Difference
Pretest	38.3	60	13.3	45.8
Posttest	84.1	100	66.6	

Referring to the data in [Table 5](#), it is apparent that there is increase in the average learning outcomes of students by 45.8. This demonstrates that learning outcomes differ between conditions before and after students "DIGINESIA" teaching materials during learning. Then, to determine the criteria for increasing the average pretest and posttest, the N-Gain test was conducted. The results of the N-Gain test can be seen in [Table 6](#).

Table 6. N-Gain Test Results

Learning Outcomes	Average	Average Difference	N-Gain	Criteria
Pretest	38.3	45.8	0.73	High
Posttest	84.1			

Based on [Table 6](#), it is established that the average difference was 45.8 in the large group product trial. This shows that the value of IV grade students of SD Negeri 2 Kedungrejo has increased by 0.73 and is included in the "high" criteria. If converted into a percentage to figure out the effectiveness of the product, the value obtained is 73.3% categorized as "quite effective". Referring to the results of the average increase, the use of "DIGINESIA" teaching materials in the subject of Civic material "My Country Indonesia" in class IV SD Negeri 2 Kedungrejo succeeded in improving the learning outcomes of students, and this teaching material is also quite effective as a support for the learning process.

Discussion

In this development research, the resulting product is flipbook-based "DIGINESIA" teaching material in the subject of Civic material "*Negaraku Indonesia*" for IV grade students of SD Negeri 2 Kedungrejo. Flipbook-based digital books are one of the innovations in the development of interactive teaching materials that are packaged in digital form and is accessible via smartphones using cellular networks. This teaching material was developed to overcome various learning problems in the classroom, such as students who are easily bored when participating in learning, not maximizing the use of technology to support the teaching and learning process, and learning that is less interactive. Teaching materials in printed form that only contain text cause a lack of interest among students and motivation in learning ([Lampropoulos et al., 2019](#); [Sufianti & Nurdyansyah, 2023](#)). The use of digital books that tend to be easy and attractive appearance makes this product suitable for application for teachers and elementary school students. Based on the design, the sections options of this digital book consist of a cover page, preface, table of contents, instructions for using the book, learning outcomes and learning objectives, materials, quizzes, bibliography, and author and supervisor profiles. The advantages of presenting material in this digital book are the addition of images, audio, video, infographics, and quizzes, thus increasing the ease and interest of student learning ([Dayanti et al., 2021](#); [Kusumaningrum & Masruro, 2022](#); [Wulandari & Nurharini, 2023](#)). The addition of animated images makes students more interested in understanding the content of the material in the digital book. In addition to images, the addition of audio, video, and infographics also adds to the attractiveness of students so that they are not easily bored during the learning process. Then, the utilization of the Wordwall platform for making quizzes at the end of learning is also very fun, because with a game-like display, students become more challenged to answer each question correctly. In previous studies, it was revealed that the addition of images will have an impact on the understanding of the material presented in the teaching materials, so this is important to pay attention to ([Nindiawati et al., 2021](#); [Wijaya, Rati, & Jayanta, 2023](#)). Other findings also reveal that the addition of videos to Teaching materials can make students comprehension easier the material ([Permana P & Manurung, 2020](#)). The contribution of the results of this study has an impact on improving student learning outcomes in Civic education through the various advantages that exist in the teaching materials that have been developed.

This "DIGINESIA" teaching material is very feasible to use as a support for the learning process in the classroom. This digital book was designed using the Canva application and converted into a flipbook form with the Heyzine website. The display is made by adding animation effects as if physically turning the pages of the book, this is very attractive to students. Furthermore, the validity test of teaching materials was carried out. The results of the teaching material validity test stated that the material expert gave a score of 90.6% in the "very feasible" category and the media expert gave a score of 95% in the "very feasible" category as well. These validity results indicate that the teaching materials that have been

developed are very feasible to use for learning support. Teaching materials are developed by adjusting the material based on learning outcomes and learning objectives (Fitri et al., 2023; Juniantari et al., 2020). The purpose of this product validation is to figure out the feasibility of the product that has been created before being tested.

After the validity test of teaching materials, then the practicality test of digital books was carried out by asking teachers and students to fill out a response questionnaire after learning using "DIGINESIA" teaching materials. The results of this response questionnaire obtained a score of 100% from teachers and 97.7% from students. These results indicate that the teaching materials that have been developed have a "very positive" level of practicality. This can be interpreted that the teaching material "DIGINESIA" is classified as practical because of the addition of digital elements in its use, so that students feel interested and easy to accept the material presented. Besides being practical in its use, this teaching material can also increase student learning motivation. This is because the role of technology in learning has an impact on the competence of students in the proper use of technology (Dwi Saputra et al., 2022; Widiyono & Millati, 2021). Of course, the participation of technology in learning will make the teaching and learning process more enjoyable, creative, innovative, and interactive, thus increasing student learning motivation (Rasheed et al., 2020; Wijaya et al., 2023).

"DIGINESIA" teaching materials can also improve student learning outcomes. This is evidenced by the increase in student learning outcomes tested using the N-Gain test. With this N-Gain test, the results of the effectiveness and feasibility of the developed product are obtained, thus showing how the improvement of student learning outcomes. The results of the N-Gain test stated that the teaching material "DIGINESIA" obtained a score of 0.73 with "high" criteria and if made a percentage the result is 73.3% with the category "quite effective". This shows that the teaching material "DIGINESIA" is effective for use in learning grade IV Civic material "Negaraku Indonesia". In line with research conducted state that the flipbook-based teaching materials he developed received a result of 90.47 which shows that these teaching materials are effective in learning (Triwahyuningtyas et al., 2020). Then, for the learning outcomes of students at the time of the pretest got an average of 38.3 and at the time of the posttest got an average of 84.1. With an average difference of 45.8, it shows that there is an increase in student learning outcomes during the learning process using "DIGINESIA" teaching materials. Based on the findings of other study this flipbook-based teaching material can support the learning process and also improve student learning outcomes (Erawati et al., 2022).

On the other hand, this study also has limitations, namely that there are some students whose smartphones are not sufficient to use this digital book. Therefore, for other studies that will make this research a reference in developing a similar teaching material, researchers have a solution that is to ensure that all students have adequate smartphones so that students can follow properly. It is even better if the school has adequate facilities such as chromebooks or tablets that can be used for students. The implication of this research is that the learning process becomes more creative and innovative because of the teaching materials in the form of digital books so that students become more interested and easily understand the material. Teachers as facilitators also become more helpful in conducting interactive learning activities. Of course this is a positive impact for teachers and students.

4. CONCLUSION

Based on the research that has been conducted, flipbook-based "DIGINESIA" teaching materials in the subject of Civic material "My Country Indonesia" subject obtained very feasible results according to the results of validation tests from material experts and media experts. Then, this teaching material is also said to be practical its use because it gets a very positive response based on the response questionnaire that has been filled out by teachers and students. The advantages in the addition of images, audio, video, and infographics make teaching materials more creative and interactive, so that students feel motivated to learn and find it easy to accept the learning material delivered by the teacher. Teaching materials can be easily accessed by teachers and students through smartphones with internet networks. In this regard, there is an increase in student learning outcomes which is supported by the results of the N-Gain test. Thus, flipbook-based "DIGINESIA" teaching materials are declared feasible, practical, and effective for use in supporting the learning process of grade IV Civic, especially the material "Negaraku Indonesia".

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