Flipbook on Indonesian cultural diversity to enhance learning outcomes for fourth graders

Hilda Kusumaningtyas [a,1,*] **, Ali Sunarso** [a,2]

[a] Primary School Teacher Education, Faculty of Education and Psychology, Universitas Negeri Semarang, Jl. Raya Beringin No.15, Wonosari, Semarang City, Central Java 50244, Indonesia

[1] kusumahilda67@students.unnes.ac.id; [2] alisunarso@mail.unnes.ac.id

* Corresponding author

Abstract: Researchers have conducted observations at SDN Denanyar 3 Sragen and obtained problematic results, namely limited learning media and low student learning outcomes in Social Sciences subjects. This study aims to develop, test the feasibility, and effectiveness of the learning media Flipbook Indonesian Cultural Diversity. The type of method used in this research is Research and Development (R&D) with the Bord and Gall development model which has 10 steps and researchers only use 9 steps. The validity test of the product being developed was carried out by material and media expert lecturers as examiners of the learning media "Indonesian cultural diversity flipbook". Results of this research include: 1.) the process of developing Flipbook media as a learning medium on Indonesian cultural diversity material, 2.) the feasibility of the Indonesian cultural diversity Flipbook media was assessed as very valid by two material and media experts validators with an average validation score of 90 .5%, 3.) t-test results show a sig value (2-tailed) 0.000 < 0.005, so there is a difference in the average results before the pretest and in the limited test and broad test, thus it can be concluded that the media can improve the learning outcomes of class IV students at SDN Denanyar 3.

Keywords: development; flipbook; learning outcomes

1. Introduction

The formal education system in Indonesia consists of several levels, starting from elementary education, junior high school, senior high school, and higher education (Muhdiyati & Utami, 2020). When talking about elementary education, basic education is the first step that children take to continue their education to junior high school, because this level is a continuation and application of basic education. Therefore, basic education has a vital role in developing basic abilities, knowledge, skills, and attitudes in students. This is a basis that must be considered before continuing education to the next level (Verdiyani, 2016).

There are many materials taught in elementary schools, one of which is Social Sciences. Social Sciences is a subject whose material contains cultural elements that discuss a problem from various perspectives of Social Sciences in an integrated manner (Sahara & Silalahi, 2022). Social Sciences aims to form good citizens, able to understand differences in race, ethnicity, religion, and so on. Social Sciences are expected to have sensitivity to social problems and social participation in community life. This is very important because we see the condition of Indonesia which has cultural diversity symbolized in Bhinneka Tunggal Ika. The differences become a strong force and must always be maintained and preserved, one of which is through the implementation of social studies learning for grade IV elementary school about the diversity of Indonesian culture. However, in reality, social studies learning in elementary schools is learning that tends to be boring and monotonous so that students easily feel dizzy and students are not fully visible during the learning process. The learning process in class is a form of activity between students and teachers to achieve success and common goals.

Based on observations and interviews conducted by researchers at SDN Denanyar 3, information was obtained that class IV teachers at SDN Denanyar 3 Sragen still did not utilize learning media such as animated videos or pictures, projector media such as laptops, speakers, and LCDs. Teachers also experience difficulties in creating learning media so that when teaching they only use media in the form of printed books from the government to support learning, it is less effective and makes students less enthusiastic and less interested in learning and teachers only use lectures and discussion methods to improve learning. This causes teachers to experience difficulties in conveying the content of learning material, especially in Social Sciences subjects. Researchers also found problems related to class IV Social Sciences learning, namely that students had difficulty understanding material about Indonesia's cultural diversity. It was found that the Social Sciences learning outcomes of class IV students at SDN Denanyar 3 Sragen were still low. Low student learning outcomes in Social Sciences subjects on Indonesian cultural diversity are caused by the lack of use of learning media in the learning process, this causes the class to become less conducive, students get bored easily, are not enthusiastic, do not focus on learning, and students are busy being alone. These problems show that Social Sciences learning needs to be improved further. Therefore, in the learning process it, is necessary to use learning media to overcome learning activities that are less effective, monotonous, boring, and so that students can understand the learning material. Flipbook media is considered capable of being an effective learning media in Social Sciences subjects covering Indonesian cultural diversity.

In the learning process, students should be able to provide opportunities to interact between students and their environment and to grow the meaning of the learning process. In the teaching and learning process, something is needed that can help learning run effectively and optimally. One way to achieve effective and optimal learning activities is by using learning media. Learning media are teaching aids that can help teachers convey the content of learning material (Sahara & Silalahi, 2022). Learning media can help the teaching and learning process be more effective and efficient and ensure good interaction between teachers and students. Learning media has the function of overcoming boredom in learning (W. N. Sari & Ahmad, 2021). Learning media has an important position in the learning process because the presence of learning media can make students enthusiastic in understanding the learning material taught by the teacher and the learning process becomes active and varied (Nurhidayati et al., 2018).

To follow up on the results of observations and interviews that researchers have conducted, there is hope from the fourth-grade teachers at SDN Denanyar 3 to develop fun and appropriate learning media for social studies subjects on Indonesian cultural diversity, therefore it is necessary to develop Flipbook learning media so that it can help in the process, learning and creating learning objectives. One of the learning media that can be arranged interestingly is Flipbook. Flipbook media is said to attract students' attention because there are lots of animated images that appear to be moving and are equipped with writing so that students are more interested, don't feel bored, and students prefer using digital books rather than digital books-printed books. Flipbook is a digital-based learning media whose pages can be turned upside down as if they are moving (Y. W. Sari & Setyawati, 2021). According to Aprilia et al (2017) the term Flipbook is taken from a series of interesting pictures of a children's toy, when the Flipbook page is opened it is as if the picture is moving. From several expert opinions above, it can be concluded that Flipbook media is an innovative media because it can attract students' attention and can eliminate students' boredom in the learning process because it can present a digital book that flips the pages. With the Flipbook media, it can create a good, interesting, interactive, communicative learning atmosphere, and can support students' understanding of the material presented by the teacher.

Flipbook media is widely used in the learning process, but there has been no innovation in developing Flipbook media so it needs to be developed. The learning media

developed by researchers is Flipbook. Flipbook was created by researchers with the help of the Canva website. Canva is an online graphic design website that is used to create attractive visual-based learning media. Several interesting features can make it easier for teachers to convey learning material to students (Kharissidqi & Firmansyah, 2022). The benefit of Flipbook is that it can present learning material content with an attractive appearance in the form of images and text (Sulistyorini, 2019). Flipbook media functions as a learning medium that can improve reading skills (Damayanti & Perdana, 2023). Flipbooks can be used as media in the learning process which can help teachers to convey learning material and can help students understand the learning material presented by the teacher (Wulandari et al., 2020).

Many previous studies have discussed Flipbook learning media for students, one of which is research conducted by Putri and Ardi (2021) which focuses on developing Flipbook-based interactive learning media on the human digestive system to improve learning outcomes for fifth-grade elementary school students so that Flipbook learning media that has been developed is very valid to use. Based on this, the Flipbook development media needs to be studied more deeply according to the needs of students and teachers. Based on research Y. Sari et al (2021), the method used in collecting data for this research is a questionnaire. The research carried out by researchers used development research with several stages, including research and data collection, planning, product design development, expert validation, expert-based revision, limited trials, product revision resulting from limited trials, field trials, and revision of the final project.

This research has a novelty that lies in the subject being researched, focusing on social science subjects with material on Indonesian cultural diversity, created with Flipbook learning media using the Canva application, so that the resulting media looks interesting for fourth-grade elementary school students. Based on the problems above, the researcher aims to test the feasibility and effectiveness of using Flipbook media in Social Sciences subjects for class IV students at SDN Denanyar 3 Sragen. In this research, the author chose Flipbook media because it can be used to distribute learning material related to Indonesia's cultural diversity so that students can understand and understand the learning material presented by the teacher.

2. Materials and Method

The research method used by researchers is research and development (R&D). The R&D method is referred to as a way to research, design, produce, and test the effectiveness the validity of certain products that have been produced (Sugiyono, 2021). Borg, W. R., and Gall (1983) explain that research and development methods are used to refine and validate a product. The steps of the Bord and Gall development model consist of: (1) Potential and problems, (2) data collection, (3) product design, (4) design validation, (5) design revision, (6) product testing (scale small scale), (7) product revision, (8) use trials (large scale), (9) product revision, (10) mass production (Assyauqi, 2020). However, researchers reached stage 9, namely revising the product. The research was conducted at SDN Denanyar 3, Sragen Regency. The subjects of this research and development are class IV students of SDN Denanyar 3 in the 2023/2024 academic year. The subjects in this study were divided into small groups for small group use trials consisting of 6 grade IV students of SDN Denanyar 3 and large scale trials of 23 grade IV students of SDN Denanyar 3.The population of class IV at SDN Denanyar 3 is 23 students. The sampling technique used is sampling based on certain objectives. Researchers used research procedures by developing Flipbook learning media assisted by the Canva application. In the development assessment process, it becomes the main goal of the successful development of the media. Product data analysis from this research is an analysis of student and teacher needs questionnaires as well as an analysis of student and teacher responses to learning media.

The provisions from Arikunto (2014) are followed, such as Formula 1 and the Student and Teacher Needs Criteria Questionnaire as in Table 1 (Anesia et al., 2018).

$$P = \frac{\Sigma x}{\Sigma xi} \times 100 \tag{1}$$

Information:

P   = Score Percentage

Σx = The number of respondents answer values in one item

Σxi = The total value of respondents' answers in on item

Table 1. Questionnaire Criteria for Student and Teacher Needs

Percentage (%)	Criteria
81 - 100	Strongly agree
61 - 80	Agree
41 - 60	Disagree
21 - 40	Strongly disagree

Analysis of student and teacher responses to learning media uses the Likert scale with 5 criteria which include 1) strongly disagree, 2) disagree, 3) strongly agree, 4) agree, and 5) strongly agree. By using the provisions from Arikunto (2014) as in Formula 1 and for the teacher response questionnaire criteria as in Table 2 (Wulandari et al., 2020).

Table 2. Teacher response questionnaire criteria

No.	Percentage (%)	Criteria	Information
1.	81 - 100	Very good	The media is very suitable and does not need to be revised
2.	61 - 80	Good	Appropriate media does not need to be a revision
3.	41 - 60	Good enough	Inappropriate media needs to be revised
4.	21 - 40	Not good	Media is not worthy of revision

Using the provisions of Arikunto (2014) as in Formula 2 and student response questionnaire criteria as in Table 3 (Wulandari et al., 2020).

$$P = \frac{F}{N} \times 100 \tag{2}$$

Information:

P = Percent value of interest in learning using media

F = Frequency for which the percentage is sought

N = Maximum score

Table 3. Student Response Questionnaire Criteria

Score Percentage (%)	Criteria
81 - 100	Very interesting
61 - 80	Interesting
41 - 60	Quite interesting
21 - 40	Less attractive
<20	Not attractive

The effectiveness of the results before the pretest and after the posttest that the students had previously carried out was analyzed on the students' cognitive learning outcomes by calculating the scores obtained by the students and testing the results before the pretest and after the posttest. This research uses a normality test to determine whether the data obtained is normally or not normally distributed. It is important to carry out data normality tests because normally distributed data can represent the population (Priyatno, 2018)**.** This research uses the normality test with Kolmogorov-Smirnov in SPSS version 23 to determine whether the data is normally or not normally distributed (Table 4) with this provision referring to (Priyatno, 2018)**.**

Table 4. Normality Test Criteria

Results	Information
If the value is significant < 0.05	Ho rejected
If the value is significant > 0.05	Ho accepted

After that, the Paired Samples T-test paired samples are carried out to determine the average difference test between two paired samples. Priyatno said that paired samples were used in groups containing the same subjects, but carried out two different treatments, such as before the pretest and after the posttest. This study used SPSS version 23 to test the results before the pretest and after the posttest with the paired sample t-test. The t-test is used for normally distributed parametric data contained in Table 5 and Table 6 with provisions referring to (Priyatno, 2018)**.**

Table 5. Testing Criteria for Paired Samples T-Test

Results	Information
If –t count > -t table or t count < t table	Ho rejected
If –t count < -t table or t count > t table	Ho accepted

Table 6. Decision Making Based on the Significance of Paired Samples T-Test

Results	Information
If the value is significant < 0.05	Ho rejected
If the value is significant > 0.05	Ho accepted

If the data is not normally distributed, it is necessary to carry out an alternative test, namely the Wilcoxon test on non-parametric data which is used to replace the paired sample t-test. To find out the average of two samples, use the Wilcoxon Test. Table 7 and Table 8 refer to the provisions of Suyanto and Gio (2017) which say that the data used is interval data or ordinal data. For the Wilcoxon test, SPSS version 23 was used in this study.

Table 7. Decision-Making in the Wilcoxon Test

Results	Information
If the value is significant < 0.05	Ho rejected
If the value is significant > 0.05	Ho accepted

Next, analyze the gain index used to calculate the assessment of pretest and posttest scores. The gain referred to in this research is normalized gain (N-gain). N-gain is the normalized gain obtained by comparing the difference between the pretest score and the posttest score with the difference between the ideal minimum score or SMI and the pretest

in Social Sciences subjects after using the Flipbook learning media and the normalized gain as in Formula 3.

$$N - Gain = \frac{Posttest\ score - Pretest\ score}{Maximum\ score - Pretest\ score} \quad (3)$$

Information:

N-gain = the size of the gain factor
Posttest Score = final test score after being given treatment
Posttest Score = initial value before treatment
Maximum Score = maximum score

Table 8. Average Gain Test (N-Gain)

Intervals	Criteria
N-gain > 0.7	High
0.3 < N-gain < 0.7	Currently
N-gain < 0.3	Low

3. Result

This researcher developed Flipbook learning media in Social Sciences subjects, material on Indonesian cultural diversity, which was implemented at SDN Denanyar 3 Sragen. The following are several things studied from the results of research on the development of Flipbook media, including: (1) Results of Flipbook Development on Indonesian cultural diversity. (2) Assessment of the feasibility of the Indonesian cultural diversity Flipbook, (3) Effectiveness of the Flipbook.

3.1 Analysis of product data

The researcher created a media development design "Indonesian cultural diversity flipbook" to improve student learning outcomes which were adapted to the teacher needs questionnaire and student needs questionnaire that had been created by the researcher. The material contained in the "Indonesian Cultural Diversity Flipbook" is adjusted to initial competencies, learning outcomes, and the flow of learning objectives which are used to clarify the content of the material that will be delivered by the teacher. The learning media "Indonesian cultural diversity flipbook" was created using the website https://canva.com. The colors used are bright colors dominated by red and white by the material on Indonesian cultural diversity, students are more interested in bright colors than just black and white. The letters used are Open Sans. The characters or images used are cartoons so students are more interested in the images presented. There are several design parts in the learning media "Indonesian cultural diversity flipbook", including: (1) initial cover, (2) foreword, (3) table of contents, (4) student learning instructions, (5) material title, learning outcomes, the flow of learning objectives, (6) content of material about Indonesian cultural diversity, (7) conclusion and bibliography, (8) profile of learning media developer "Flipbook of Indonesian cultural diversity", (9) final cover. The media "Flipbook of Indonesian Cultural Diversity" is in the form of a product with the format https://anyflip.com and the learning media "Flipbook of Indonesian cultural diversity" can be accessed via the website link: https://anyflip.com/aughr/kyty/. The cover of flipbook can be seen in Figure 1 and display of flipbook contents as in Figure 2.

Figure 1. View of the Flipbook Cover

Figure 2. Display of Flipbook Contents

3.2 Product Validation

The feasibility test for Flipbook media based on calculations using the validity formula obtained a percentage value of 93% (Table 9). The validity criteria table shows that the final validation value for Flipbook media is in the value range of 85.1% - 100% with very valid validation criteria.

Table 9. Results of Flipbook Feasibility Test for Indonesian Cultural Diversity

Validator	Score Percentage %	Criteria
Material	88%	Very Valid
Media	93 %	Very Valid
Average	90.5 %	Very Valid

3.2.1 Analysis of Student and Teacher Needs Questionnaires

Initial data was obtained in the form of interviews with observation activities at school. Based on the teacher's initial analysis, it can be concluded that teachers experience difficulties in conveying simple comic material it has a direct impact on student learning outcomes which tend to be low. The main factor in this problem is the unavailability of learning media that supports the learning process in the classroom. Researchers carried out follow-up by creating a questionnaire on teacher and student needs to solidify the concept of learning media. Table 10 is the result of a questionnaire on teacher and student needs.

The initial data in this research was obtained from interviews and school observation activities. Based on the results of the teacher's initial analysis, it can be concluded that teachers experience difficulties in conveying the content of learning material about Indonesia's cultural diversity, which has an impact on student learning outcomes which are relatively low. The main problem is the unavailability of appropriate learning media to support learning activities in the classroom. In this research, the researcher carried out a follow-up by creating a questionnaire regarding the needs of students and teachers to implement the concept of learning media.

Table 10. Analysis of Student and Teacher Needs Questionnaire

Student	75%
Teacher	86%
Average	80.5%

Table 10. Shows data from the student and teacher needs questionnaire. It is known that the average result of the student and teacher needs questionnaire regarding the development of Flipbook learning media is 80.5%, so it is included in the strongly agree criteria.

3.2.2 Analysis of Teacher and Student Responses to Media

The purpose of filling out the student and teacher needs questionnaire is to find out responses and opinions regarding the use of Flipbook media. The teacher response questionnaire after a trial was carried out using Flipbook media is in 86%. The results of teacher responses to Flipbook media can be seen in the teacher response   questionnaire to the media. It was found that the average teacher response after the post-test was 86% and entered the very good criteria with very appropriate media information, with no need for revision.

The results of the student response questionnaire to Flipbook media regarding Indonesian cultural diversity can be seen from the student response questionnaire to the media. The results of the student response questionnaire were obtained by carrying out limited trials and extensive trials, then looking for the average of the student response

questionnaire results. It was found that the results of the limited trial showed that the average student response previously was 88%, after being given a questionnaire, student responses in the extensive trial increased by 94%, so the final result was that the average student response was 91%, which was included in the very good criteria (Table 11). Based on the results of students' responses to Flipbook media, it shows that Flipbook media can make fourth-grade students happy and happy during the learning process and students can understand the content of material on Indonesian cultural diversity.

Table 11. Results of the Student Response Questionnaire

Limited Trial Results	Extensive Trial Results	Average
88%	94 %	91%

3.3 Preliminary Data Analysis

The normality test was carried out to find out whether the pretest and posttest data for class IV students had a normal or abnormal distribution. The normality test can help researchers determine the data analysis used from the data obtained. Normally distributed data using parametric statistical techniques. The normality test uses the Shampiro-Wilki test formula with the help of the SPSS version 23 application, the SPSS application is useful for knowing the results of the normality test.

3.3.1 Normality Test

The initial stage in this research is the normality test. The normality test is used to determine whether the data is normally distributed or not. The data tested is the value before the pretest and after the posttest in the small group and large group. Researchers used the Shapiro-Wilk test method with the help of the SPSS version 23 application. The following are the results of the data normality test before the pretest and after the posttest in small groups.

The results of the large group normality test are presented in Table 12. Table 12 shows the results of the normality test in the limited trial implementation. Based on the Shampoo Wilk sig column output table, the value before the pretest is $0.121 > 0.05$ and the value after the posttest is $0.191 > 0.05$. Both values are greater than 0.05, and it can be concluded that these two values are normally distributed, so the conditions for the paired difference test (paired sample t-test) are met. This is because the results of the normality test show that data with a normal distribution can be carried out with a t-test. The t-test results were obtained from the results of pretest and posttest data which were processed using SPSS 23.

Table 12. Limited Trial Results

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig
pretest	.270	6	.194	.836	6	.121
posttest	.195	6	.200*	.861	6	.191

*. This is a lower bound of the true significance
a. Lilliefors Significance Correction

Table 13 is the result of the t-test on limited trials. Table 13 shows the results of the normality test on extensive trial activities. Shapiro Wilk's sig column output table, for the value before the pretest, is $0.490 > 0.05$ and the value after the posttest is $0.245 > 0.05$. These two values are greater than 0.05, so it can be concluded that both values have a normal distribution, so the paired sample t-test is fulfilled because the normality test results show the data is normally distributed and then the t-test can be carried out. The t-test results were obtained from the data results before the pretest and after the posttest which were processed using SPSS 23.

Table 13. Normality Test Results in Wide Trials

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
pretest	.208	17	.049	.952	17	.490
posttest	.186	17	.121	.933	17	.245

a. Lilliefors Significance Correction

3.3.2 T-Test

The t-test was carried out to determine whether there were relevant differences between the averages before the pretest and after the post-test. The method used is a paired sample t-test. This is because the test uses two paired samples, this test is carried out using SPSS version 23 software. The results of the Paired Sample T-test in small groups are placed in Table 14.

Table 14. T-Test Results in Limited Trials

		Paired Differences							
					95% Confidence Interval of the Difference				Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	
Pair 1	Pretest-posttest	-29.167	11.143	4.549	-40.861	-17.473	-6.412	5	.001

Table 14 shows the results of the t-test on limited trials showing a sig value. (2-tailed) $0.001 < 0.005$, then H_0 is rejected and Ha is accepted then it can be concluded that there is a difference in the average results of the pretest and posttest so that there is an influence in using the Indonesian Cultural Diversity Flipbook media to improve the learning outcomes of fourth-grade elementary school students.

The results of the t-test in the large group are in Table 15. Table 15 shows the results of the t-test in the broad test showing a sig value. (2-tailed) $0.000 < 0.005$, then H_0 is rejected and Ha is accepted then it can be concluded that there is a difference in the average results of the pretest and posttest so there is an influence on the use of Flipbook media. From the table above, the results after the posttest are superior to the pretest scores. The results after the posttest show that students' scores have increased after using the Flipbook learning media. So, it can be concluded that using the Flipbook learning media can improve the learning outcomes of class IV students on material about Indonesian cultural diversity.

Table 15. T-Test Results in Extensive Trials

		Paired Differences							
					95% Confidence Interval of the Difference				Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	
Pair 1	Pretest-posttest	-13.235	7.694	1.866	-17.191	-9.280	-7.093	16	.000

3.3.3 N-gain test

The average increase test was carried out to determine the average increase before the pretest and after the posttest. The N-gain analysis technique is used to calculate the average increase before the pretest and after the posttest. N-gain is the normalized gain obtained by comparing the difference between SMI and after the posttest. Gain is the average increase

in learning outcomes in data collection and presentation material after using the Flipbook Presentation and Data Collection learning media.

The results of the n-gain test in the small group are in Table 16. Based on the calculation of the average increase test (N-gain) in the limited trial, there was an average increase of 0.69, including in the small group with high criteria.

Table 16. N-gain Test Results in Limited Trials

	N	Minimum	Maximum	Mean	Std. Deviation
ngain_skor	6	.57	.91	.6968	.14077
ngain_percentage	6	57.14	90.91	69.6753	14.07659
Valid N (listwise)	6				

The results of the N-gain test in the large group are in Table 17. Based on the calculation of the average gain (N-gain) in the broad test, it shows that there is an average increase of 0.69 which is included in the medium criteria.

Table 17. N-gain Test Results in Wide Trials

	N	Minimum	Maximum	Mean	Std. Deviation
ngain_skor	17	.11	.71	.3599	.21426
ngain_ percentage	17	11.11	71.43	35.9890	21.42580
Valid N (listwise)	17				

4. Discussion

Data collection was carried out by researchers through observations and interviews at SDN Denanyar 3 Sragen which focused on the challenges of implementing education faced at the school. By carrying out observation and interview activities it was discovered that students were less interested in social studies subjects because they tended to be monotonous and boring, thus affecting student learning outcomes. class IV is low. The learning media used by teachers when learning social sciences does not make students interested and does not help students understand the material taught by the teacher. A flipbook is a learning medium that is displayed in the form of (an e-book) or electronic book (Setiadi et al., 2021). It is hoped that the use of learning media with interesting and funny animated images can make students interested and increase students' motivation and interest in learning (Antara et al., 2022). This is in line with the opinion of Nurrita (2018) who says that using learning media can increase motivation and interest in learning, so that students can understand the material easily and can create a pleasant learning atmosphere.

Flipbooks can be used as learning media which is an alternative solution to support learning in schools (Amanullah, 2020). Three criteria for learning are said to be good, including (1) practical, which means it can be used according to students' needs, (2) valid, which means it meets the requirements to be tried, and (3) effective, which means it can provide facilities for students to achieve results learning (Yuliani & Setiawan, 2023). Learning using Flipbook media will be very varied and attract students' attention, starting from visual and audio-visual displays, so that the learning atmosphere in the classroom becomes interactive, and communicative, and can increase students' understanding of the material taught by the teacher. The use of Flipbooks has a positive impact on increasing the quality of the learning process and student learning outcomes (Isnaeni & Agustina, 2018).

The media developed by researchers is different from other learning media because no one has developed Flipbook media regarding Indonesian cultural diversity. When researchers conducted research, class IV students could experience it directly by seeing, reading, and understanding the material on Indonesian cultural diversity contained in the Flipbook. The advantage of the Flipbook media developed by researchers is that it is easy

to share and access anywhere by teachers and students, both at school and at home, so it can increase students' reading activities (Rahayu, 2021).

Data on the feasibility of Flipbook media regarding Indonesian cultural diversity was obtained from material validation questionnaires and media validation questionnaires which were analyzed qualitatively. Data obtained from material expert validation was 88%, this is by research Aprilia et al (2017) that Flipbook can convey the content of learning material practically and concisely. Furthermore, the data obtained from media expert validation was 93%. One of the aspects assessed in the Flipbook media was the selection of animated images that were appropriate to the character of elementary school-age children. In line with this, the Flipbook learning media developed by researchers is suitable for application as a medium in the classroom learning process.

The subjects tested in this research were class IV students at SDN Denanyar 3 Sragen with a total of 6 students. Learning in class uses flipbook media and the learning approach used is a scientific approach. A scientific approach using animated images can make it easier for students to understand learning material (Putri & Ardi, 2021). The pretest activity was used for a limited trial, then a trial was carried out on the Flipbook media which had been developed through social studies learning, then a questionnaire was given on students' responses to the implementation of the learning and ended with evaluation activities. The Flipbook media developed is by the character of elementary school-age students. This is by the results of the student response questionnaire which obtained 91% in very good criteria.

The subjects tested in this research were 23 class IV students at SDN Denanyar 3 Sragen. It was found that the average student response result in the previous limited trial was 88%, then after being given a questionnaire the student response in the extensive trial increased, namely 94%, so that the final average result of the limited trial and extensive trial was 91% with the criteria very good, so there was an increase in the learning outcomes of class IV students at SDN Denanyar 3 using Flipbook media. Research conducted at SDN Denanyar 3 Sragen shows that the Flipbook learning media is very effective in improving the learning process and can improve the learning outcomes of class IV students at SDN Denanyar 3 Sragen. Data obtained on the results of increased learning after using Flipbook media was 69.67% in small trials and 35.989% in large-scale trials. This is according to research conducted by Yulaika et al (2020) that Flipbook media can improve student learning outcomes.

5. Conclusion

Researchers developed the learning media "Indonesian cultural diversity flipbook". There are several design parts in the learning media "Indonesian cultural diversity flipbook", including: (1) initial cover, (2) foreword, (3) table of contents, (4) student learning instructions, (5) material title, learning outcomes, the flow of learning objectives, (6) content of material about Indonesian cultural diversity, (7) conclusion and bibliography, (8) profile of learning media developer "Flipbook of Indonesian cultural diversity", (9) final cover. The media "Indonesian cultural diversity flipbook" that researcher developed obtained a percentage of 88% from material experts and 93% from media experts, so it can be concluded that the learning media "Indonesian cultural diversity flipbook" is very suitable for use. From the results of the questionnaire responses from teachers and students, an average final score of 90% was obtained so that it was included in the very good category. There is a difference in the average learning results before and after using the media "Indonesian cultural diversity flipbook" in limited trials and extensive trials, namely the t-test, in limited trials it shows a sig value. (2-tailed) $0.001 < 0.005$ then in a wide trial it shows a sig value. (2 tailed) $0.000 < 0.05$, this shows that there is a positive influence from the development of the media "Indonesian cultural diversity flipbook" on the learning outcomes of class IV students at SDN Denanyar 3. So it can be concluded that there is a

significant difference in learning outcomes before and after the use of media "Indonesian cultural diversity flipbook.

Author Contribution: Hilda Kusumaningtyas is the author and main researcher in this article, Hilda Kusumaningtyas is tasked with collecting research data, making instruments for needs questionnaires, response questionnaires, validation questionnaires for material and media experts, evaluation, developing products, testing products, processing research data, and as the author of the draft article. Ali Sunarso is the researcher and second author of this article and Ali Sunarso is the supervisor who directed the main author in completing this article. Ali Sunarso is in charge of validating the instrument and validating the initial product design before going to material and media expert validators.

Conflict of Interest: Declare a conflict of interest.

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