



Articulate Storyline 3 Media to Improve Learning Outcomes in Natural and Social Sciences Subjects in Fourth-Grade Elementary School

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ABSTRAK

Kurangnya pemanfaatan dan penggunaan media pembelajaran yang bervariasi menyebabkan belum tercapainya hasil belajar siswa secara maksimal pada mata pelajaran IPA dan IPS kelas IV sekolah dasar. Penelitian ini bertujuan untuk menghasilkan produk berupa Articulate Storyline 3 yang digunakan sebagai media pembelajaran mata pelajaran IPA dan IPS, serta materi tentang keanekaragaman budaya yang ada di Indonesia. Jenis penelitian yang digunakan adalah Research and Development dengan model pengembangan ADDIE. Subyek dalam penelitian ini meliputi ahli media, ahli materi, guru, dan siswa kelas IV SD yang berjumlah 28 orang. Pengumpulan data dalam penelitian ini berupa teknik tes dan teknik non tes. Teknik tes menggunakan pretest dan posttest, sedangkan teknik nontes menggunakan observasi, wawancara, angket, dan dokumentasi. Selanjutnya teknik analisis data yang digunakan adalah uji normalitas, uji t, dan uji N-Gain yang diolah menggunakan aplikasi SPSS 23. Uji N-Gain pada uji kelompok kecil dan uji kelompok besar memperoleh nilai sebesar 0,60 dan 0,64 dengan kategori sedang, sehingga disimpulkan terdapat peningkatan rata-rata nilai pretest dan posttest siswa. Dengan demikian penelitian ini menyimpulkan bahwa media Articulate Storyline 3 sangat cocok dan efektif digunakan dalam meningkatkan hasil belajar siswa pada materi keanekaragaman budaya di Indonesia pada kelas IV sekolah dasar.

ABSTRACT

The lack of utilization and varied use of learning media means that student learning outcomes have not been achieved optimally in Natural and Social Sciences subjects in grade IV elementary schools. This research aims to create a product in the form of Articulate Storyline 3 which is used as a learning medium for Natural and Social Sciences subjects, and material about cultural diversity in Indonesia. The type of research used is Research and Development with the ADDIE development model. The subjects in this research included media experts, material experts, teachers, and 28 fourth-grade elementary school students. Data collection in this research took the form of test techniques and non-test techniques. Test techniques use pretest and posttest, while non-test techniques use observation, interviews, questionnaires, and documentation. Furthermore, the data analysis techniques used were the normality test, t-test, and N-Gain test which were processed using the SPSS 23 application. The N-Gain test in small-group trials and large-group trials obtained values of 0.60 and 0.64 in the medium category, so it was concluded that there was an increase in the average student pretest and posttest scores. Thus, this research concludes that the Articulate Storyline 3 media is very suitable and effective for use in improving student learning outcomes on cultural diversity material in Indonesia in class IV elementary schools.

1. INTRODUCTION

Education is one of the most important components of a country. Education is an effort made by humans to develop their potential through a formal and informal learning process. Education is a human right, and education must be open, non-discriminatory, and available to all citizens (Prestiana & Sugito, 2021; Sujasan & Wibowo, 2021). In essence, education is a deliberate attempt undertaken by an individual or group to cultivate the capacity for responsible, rational thought and reasoning to achieve self-maturation. Through education, humans can develop their abilities or skills obtained from the learning process which aims to form quality individuals. Education is the main aspect of human self-development to improve knowledge (S. M. Sari & Ganing, 2021; Werang et al., 2023). Education becomes important along with the development of science and technology, therefore education has a large role in the progress of a country (Ayuwanti et al., 2021; Crisvin. et al., 2023). Education includes all lifelong learning processes in various situations that positively influence each individual's growth. Education has an important role in forming a

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young generation that is qualified and has the potential to contribute to the development of society. Education aims to develop students' potential, knowledge, insights, and experiences (Afandi et al., 2021; Pristiwanti et al., 2022).

Education can be carried out through a learning process carried out by students as a form of effort to develop potential with the knowledge to positively impact themselves and society. The learning process is an effort planned by educators to create a learning process for students (Ariani & Suciptaningsih, 2023; Darnawati et al., 2021). The ideal learning process can be adapted to students' conditions, which is expected to stimulate their thinking abilities and creativity so that learning outcomes and learning objectives can be achieved optimally. To raise the standard of education itself, the efficacy and efficiency of the learning process must always be increased. Through the learning, students are expected to be able to develop their learning achievements so that cognitive, affective, and psychomotor aspects can be achieved (Wahyuningtyas & Sulasmono, 2020; Winda & Dafit, 2021). One form of increasing the effectiveness and quality of learning is by using learning media during learning activities which is useful for improving student learning outcomes. Learning activities by utilizing the right media will create a pleasant learning atmosphere so that it becomes active, creative, effective, and meaningful for students (Hanannika & Sukartono., 2022; Neteria et al., 2020).

Media are tools and materials used to make it easier to achieve learning goals because they contain information or learning materials. Learning media is a tool that functions to convey learning material used through educators to people who are learning so that it can be understood well and effectively. Learning media has an important role in improving student achievement or learning results because it can help in understanding material during the learning. The use of media is an important part for teachers to pay attention to in every learning process. Teachers need to learn how to choose and use learning media so that learning objectives are achieved effectively (Wasiyah et al., 2023; Wulandari et al., 2023). The use of learning media can support effectiveness and efficiency in learning activities so teachers in choosing media must be truly appropriate so that the expected learning objectives can be achieved easily. However, in reality, there are still many teachers who are unable to provide interesting learning for students and do not fully use appropriate learning media (Pinem & Rahmawan, 2023; Sihombing et al., 2023).

Based on interviews conducted by researchers in class IVA at SDN Ungaran 1 Yogyakarta, several problems were found, including students' lack of enthusiasm for participating in Natural and Social Sciences learning. This is because, in the Natural and Social Sciences learning process, there is still a lack of use or utilization of appropriate learning media. Students' lack of enthusiasm in the Natural and Social Sciences learning process can also be seen when there are still many students who do not pay attention to the material being presented by the teacher. Students are also less active in participating in Natural and Social Sciences learning because the teacher delivering the material only relies on the textbook. Students also only memorize Natural and Social Sciences material which is still abstract. In the end, achieving the KKM (Minimum Completeness Criteria) or student learning outcomes is not achieved optimally. Given these problems, the solution that can be taken is to utilize technology to create interactive learning media.

Technological advances have caused a paradigm shift in the world of education, where technology causes global changes that ultimately have an impact on learning. Technology makes it easy for teachers and students to access material so they can learn anywhere, anytime, and anywhere (Kusuma et al., 2022; Susilawati & Rusdinal, 2022). A teacher's understanding of technology also affects the quality of teaching. One of the impacts of technological advances in learning is the development of interactive learning media that can make students interested and happy with learning activities. By utilizing technological developments, teachers can create learning media (Kanya et al., 2021; Melinda & Saputra, 2021). Regarding technology, an educator can provide facilities in the learning process with information, communication, and technology-based media. With advances in technology, educators can adapt to the learning needs of students by developing interactive learning media that have characteristics appropriate to the learning process. Interactive learning media has the most important characteristic, namely that students can interact directly during lessons so they don't only pay attention to the presentation of material or objects (Afifah et al., 2022; Harsiwi & Arini, 2020; Pinem & Rahmawan, 2023). Interesting interactive learning media are used to help convey material or information and can create fun learning for students. Interactive learning media can help achieve educational goals effectively and efficiently because, in the learning process, it can convey the meaning of the message more clearly.

One of the interactive learning media that can be used for the learning process is Articulate Storyline 3. Articulate Storyline is an application on a computer that is used to create interesting interactive learning media because it displays images, sound, video, and educational games that are appropriate to the learning material required by students and makes students active in participating in learning activities (Legina & Sari, 2022; C. Y. Putri & Rahmatina., 2022). Articulate Storyline is easy for users to access anywhere and anytime because this media can be converted into links. The use of Articulate Storyline 3 is

easy to use and share with students, here the teacher is a facilitator because Articulate Storyline 3 can be shared via a link or an application that can be downloaded independently. Relevant research in accordance with the problems found by researchers show an increase in student learning outcomes by using Articulate Storyline media (Heliawati et al., 2022). This can be proven by obtaining an average score of 88.5% for the material expert validation test and the media expert validation test obtained an average score of 92% in the very feasible category. Apart from that, student learning outcomes in the pre-test were 61.58%, after using Articulate Storyline there was an increase in student learning outcomes in the posttest with an average score of 84.74%. Then, using the N-Gain test, we got a value of 0.621, which is included in the medium category. Based on these results, the Articulate Storyline media is very suitable and effective for use in the learning process (Hidayah et al., 2023; Ningsih et al., 2023).

Based on the problems found, researchers are interested in developing learning media based on Articulate Storyline 3 in the Natural and Social Sciences subject material on cultural diversity in Indonesia for class IV elementary schools. The novelty of this study is this media is made with various interesting images of cultural diversity in Indonesia and animations that suit the characteristics of elementary school students. This development research aims to develop Articulate Storyline 3-based media that is suitable for use in the Natural and Social Sciences learning process regarding cultural diversity in Indonesia and to test the effectiveness of the media that has been developed by researchers. Apart from that, the existence of this media which has been developed by researchers can help students understand the learning material so that student learning outcomes can improve.

2. METHOD

The type of research used by researchers is R & D (Research and Development) research using the ADDIE design model. The Research and Development method is a research method for those who are used to produce certain products and test their effectiveness (Sugiyono, 2017). Researchers will conduct research at SD Negeri 1 Yogyakarta by carrying out 5 stages of research, namely Analysis, Design, Development, Implementation, and Evaluation. The five steps can be seen in Figure 1.

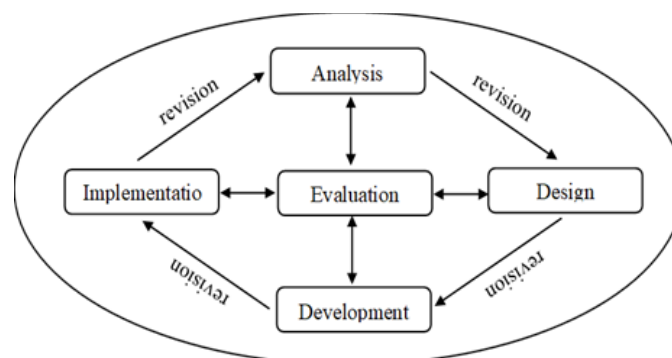


Figure 1. ADDIE Model Development Stage

In the analysis stage, the products must be created based on the findings of the environment and work scenario analysis stage. Designing a product that meets your needs is the goal of the design stage. The stage of a product's creation and testing is known as development. Using the created product is known as the implementation step. The evaluation stage involves determining whether created or manufactured products are feasible and effective. The subjects in this research were a media expert, a material expert, a teacher, and 28 class IVA students at SD Negeri Ungaran 1 Yogyakarta. A media expert and material expert aim to assess the Articulate Storyline 3 media that has been developed and the material contained in that media. Class teachers can assess the Articulate Storyline 3 media that has been developed by researchers according to the questionnaire that has been given. Then carry out a small group test on 6 students and a large group test on 22 students. Meanwhile, data collection was carried out using test techniques and non-test techniques. The test technique is carried out by means of a pretest and posttest which aims to measure student learning outcomes in learning Natural and Social Sciences on cultural diversity in Indonesia. Non-test techniques are implemented through interviews, distributing questionnaires, and documentation. Then, the data analysis technique used to determine the effectiveness of the Articulate Storyline 3 media was carried out through a normality test, T-Test, and N-Gain test which were determined from the results of the student's pretest and post-test. To determine the suitability of learning media, an assessment is carried out by distributing questionnaires conducted by experts, teacher responses, and student responses.

The questionnaire grid for media expert validation, material expert validation, teacher responses, and student responses is show in Table 1, Table 2, Table 3, Table 4.

Table 1. Learning Media Expert Assessment Grid

No.	Aspect	Indicator	Number of Items
1	Display	Attractive display Appropriateness of the menu layout on the media Appropriateness of text, images, and content presented Appropriateness of colors displayed Appropriateness of the typeface used Appropriateness of the images used	6
2	Ease of Use and Navigation	Suitability of instructions for use Conformity of navigation to its function Ease of media use Media can be shared	4
3	Media Integrity	Button reaction speed Image suitability with material content	2
4	Media Benefits	Suitability in helping students learn Media is flexible	3

Table 2. Learning Material Expert Assessment Grid

No.	Aspect	Indicator	Number of Items
1	Curriculum	Suitability of material with learning outcomes Suitability of material with learning objectives Appropriateness of the topic taught	3
2	Material	Suitability of material to students' intellectual Development Suitability of material to students' emotional Development Sequence of learning material Clarity of material with images	7
3	Language	Use of appropriate language Language suitability with student characteristics	1
4	Evaluasi	Suitability of questions with learning objectives Question difficulty level Appropriateness of scoring	4

Table 3. Teacher Response Assessment Grid

No.	Aspect	Indicator	Number of Items
1	Curriculum	Suitability of material with learning outcomes Suitability of material with learning objectives	2
2	Material	Sequence of learning material Appropriateness of the material to the students' level of thinking Availability of evaluation questions	4
3	Display	Attractive display Attractive image presentation	3
4	Media Benefits	Media is easy to use Media helps student understanding Media improves student learning outcomes	6

Table 4. Student Response Assessment Grid

No.	Aspect	Indicator	Number of Items
1	Learning	Learning implementation	5
2	Material	Sequence of learning material Ease of learning material	3

No.	Aspect	Indicator	Number of Items
3	Visual Display	Availability of evaluation questions	3
		Attractive display	
		Appropriateness of font type and size	
4	Media Benefits	Attractive image presentation	4
		Media helps student understanding	
		Media fosters students' interest in learning	

3. RESULT AND DISCUSSION

Result

This research produces a product in the form of learning media based on Articulate Storyline 3, material on cultural diversity in Indonesia for the fourth grade of elementary schools. This research presents results in the form of (1) design for developing learning media based on Articulate Storyline 3, (2) feasibility of learning media based on Articulate Storyline 3, (3) Effectiveness of learning media based on Articulate Storyline 3. The procedure in this research uses the R & D method. The development of the ADDIE model went through 5 stages, namely the analysis, design, development, implementation, and evaluation. The following are the results of research into the development of Articulate Storyline 3 media in class IV regarding cultural diversity in Indonesia.

Analysis

Researchers made observations and identified problems related to student characteristics, learning models, learning resources, and media used during the learning process. According to data that has been collected through interviews with teachers and distributing questionnaires regarding the needs of teachers and students, it was found that students were less enthusiastic about participating in Natural and Social Sciences learning because teachers during learning used less varied media. Apart from that, the problems found by teachers were that most of them used lecture methods and teaching was still centered on textbooks. This can affect student learning outcomes because they are less enthusiastic in participating in learning and students also have difficulty understanding the material. Based on the initial data that has been collected regarding the learning process and student needs, it is necessary to develop interactive learning media that can solve problems in learning activities. Then the researcher carried out an analysis of the material based on the curriculum used in learning activities. The researcher carried out an analysis of the Natural and Social Sciences subject material on cultural diversity in Indonesia with learning outcomes in the form of students getting to know cultural diversity, local historical wisdom (both figures and periodization) in the province where they live and connecting it with the current context of life.

Design

At this stage, the researcher designs the learning media that will be used. After the analysis stage carried out from the observation, interview, and needs questionnaire processes, solutions to problems in the learning activities were sought by creating interesting Articulate Storyline 3-based learning media so that students became enthusiastic in participating in learning and optimal learning outcomes could be achieved. At this design stage, the researcher designed a learning media concept based on Articulate Storyline 3. The researcher created a storyboard from Articulate Storyline 3 media which was adapted to the results of the analysis of student and teacher needs and also adapted to competencies in class IV Natural and Social Sciences learning material on cultural diversity in Indonesia. This material includes ethnic groups, regional languages, traditional clothing, regional songs, traditional weapons, traditional dances, regional foods, traditional performances, community traditions, traditional houses, and traditional musical instruments. Researchers created sketches of images and navigation buttons via the Canva website. At the end of the Articulate Storyline 3, interactive quizzes and practice questions are also made that aim to make it easier for students to understand the material that has been learned.

Development

Development is the third stage of the ADDIE model when researchers produce media based on the outcomes of the Articulate Storyline 3 design. The development of learning media must also be by the curriculum used at SD Negeri Ungaran 1 Yogyakarta, class IV Natural and Social Sciences subjects, and cultural diversity material in Indonesia. Here are the results of Articulate Storyline 3.



Figure 2. Cover



Figure 3. Menu Display



Figure 4. Hint Display



Figure 5. Map of Indonesia



Figure 6. Bali Island View



Figure 7. Traditional Dance Material



Figure 8. Quiz Menu Display



Figure 9. Evaluation Results

Implementation

At this stage, it is carried out through small-group trials and large-group trials. Before carrying out trials in small and large groups, the Articulate Storyline 3 media was validated by experts. Validation was carried out by distributing questionnaires to media experts and material experts. Media experts will test the validity of the Articulate Storyline 3 media, while material experts will test the validity of material on cultural diversity in Indonesia in grade IV elementary school Natural and Social Sciences subjects. The assessment results from media experts and material experts aim to improve the Articulate Storyline 3 media that will be tested. After receiving assessments from media experts and material experts from the questionnaire, the researchers carried out pretests and posttests on small group trials on 6 students and large group trials on 22 students. The pretest is used before the Articulate Storyline 3 media is given, then in the learning process, students are given the Articulate Storyline 3 media which is followed by carrying out the posttest. Trials in small groups and large groups were carried out to determine the effectiveness of Articulate Storyline 3 media in the learning process.

The data analysis technique used after carrying out the pretest and posttest in small groups and large groups carried out several tests, namely the normality test, paired samples test, and N-Gain test. In carrying out the normality test using SPSS 23. The results of the normality test in the small group showed a sig value of 0.325 for the pretest and for the posttest, it showed a sig value of 0.104. The normality test in the large group showed that the pretest score had a sig value of 0.77 and the posttest score had a sig value of 0.86. The Paired Samples Test and N-Gain in small groups and large groups is show in Table 5.

Table 5. Paired Samples Test in Small Groups

Paired Group	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pretest-Posttest	-25.00	16.733	6.831	-42.560	-7.440	-3.660	5	0.015

In Table 5, the results of the paired samples test in small groups showed the influence of using Articulate Storyline 3-based learning media obtained from sig (2-tailed) of 0.015. So, it can be implied that H_0 is rejected and H_a is accepted. The result of paired samples test in large groups is show in Table 6.

Table 6. Paired Samples Test in Large Groups

Paired Group	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pretest-Posttest	-30.00	12.910	2.752	-35.724	-24.276	-10.900	21	0.000

In the paired samples test in Table 6 for the large group, the sig (2-tailed) result was 0.000, which can be concluded that there is an influence of the use of Articulate Storyline 3 media. So H_0 is rejected and H_a is accepted. So, from the results of the t-test in small and large group trials, it can be concluded that there is a difference in student learning outcomes before using and after using Articulate Storyline 3 media on cultural diversity material in Indonesia, Natural and Social Sciences subjects in class IV elementary schools. Then the N-Gain test table for small groups and large groups is show in Table 7.

Table 7. N-Gain Test in Small Groups

Statistics	Pretest	Post-test	Range	N Gain	N Gain (%)	Criteria
Mean	57.5	82.5	25	0.60	60%	Medium

Based on Table 7, the N-Gain Test table in small groups, the data shows that there is an average increase with moderate criteria from the pretest and posttest data, which is shown by a value of 0.60. N-Gain test in large groups is show in Table 8.

Table 8. N-Gain Test in Large Groups

Statistics	Pretest	Post-test	Range	N Gain	N Gain (%)	Criteria
Mean	53.18	83.18	30	0.64	64%	Medium

Based on the N-Gain Test in Table 8 in the large group, data was obtained that there was an average increase with moderate criteria from the pretest and posttest data, which was indicated by an N-Gain value of 0.64. With the results of the N-Gain test analysis in small and large group trials, it was concluded that there was an increase in the average student learning outcomes in the pretest and posttest that had been carried out.

Evaluation

The fifth stage is evaluation, researchers evaluate the Articulate Storyline 3 media by assessing experts, teacher responses and student responses. Assessment of the validity test of Articulate Storyline 3 media products by a media expert is a lecturer in Elementary School Education at Semarang State University. Then the material validity test assessment on Articulate Storyline 3-based learning media was carried out by the material expert, a lecturer in Elementary School Education at Semarang State University. The teacher's response to the assessment of the Articulate Storyline 3 learning media was carried out by the class teacher. Meanwhile, students' responses to the Articulate Storyline 3 learning media were carried out through small and large group trials. The purpose of testing and assessing product validity is to determine the suitability of the Articulate Storyline 3 media that has been developed. The results of

assessments carried out by experts, teacher responses, and student responses to Articulate Storyline 3 media is show in [Table 9](#).

Table 9. Product Validity Test

No	Test Subjects	Percentage	Category
1.	Media Expert Test	85%	Very Worth It
2.	Material Expert Test	91.6%	Very Worth It
3.	Small Group Trials	95.5%	Very Worth It
4.	Large Group Trials	86.3%	Very Worth It
5.	Class Teacher Test	91.6%	Very Worth It

Based on the product validity test in [Table 9](#), the results obtained from media experts were 85% which was included in the very feasible category, then material experts were 91.6%, teacher responses were 91.6%, small group trials were 95.5%, trial large group of 86.3%. From the results of the assessment of Articulate Storyline 3-based learning media carried out by experts, teachers, and students, it was found that the category was very feasible. The advice from media experts is that the layout of the menu buttons must be in the correct order, the background on the quiz be changed to white, and when enlarging the image the material needs to be adjusted to match the screen. Meanwhile, advice from material experts is that before material on cultural diversity in Indonesia, it needs to be adapted and introduced to the cultural diversity that exists in the environment around students.

Discussion

Teachers need to pay attention to needs related to learning activities, one of which is using appropriate learning media to help students understand learning material. Using appropriate learning media can motivate students to learn increase student involvement in learning and help them absorb information from learning easily ([Akuba & Uno, 2023](#); [Firdawela & Reinita, 2021](#)). Educators can use technology to create fun interactive learning media, one of which is using software, namely Articulate Storyline. Articulate Storyline is an application used to create a simple and fun learning media ([Lubis & Sukmawarti, 2023](#); [Mufidah & Khorri, 2021](#)). Based on the results of the media expert's test assessment, Articulate Storyline 3 media received a score of 85% in the very appropriate category. In developing this media, researchers adapted it to the characteristics of elementary school students who like attractive images, colors, and animations to help understand learning material. The characteristics of elementary school students generally really like diverse images, bright colors, and interesting animations to make it easier to receive the material ([Rizqiyah et al., 2023](#); [Sukarini & Manuaba, 2021](#)). The advantage of using Articulate Storyline 3 media is that it can be used anywhere and at any time because it uses an HTML5 link that is shared with students. For independent learning, students can access the link created by the teacher at any time to study material on Articulate Storyline 3 media. Other research also says that using Articulate Storyline media in independent learning makes it easier to access and use anytime and anywhere ([Hidayah et al., 2023](#); [Indriani et al., 2021](#)).

Based on the results of the material expert test assessment, Articulate Storyline received a score of 91.6% in the very appropriate category. The Articulate Storyline media that has been developed has been adapted to learning objectives and students look more active and motivated by using this media because there are practice questions. Using Articulate Storyline 3 can make students more active and enthusiastic in the learning process, such as being enthusiastic when doing practice questions looking enthusiastic when working on LKPD, and playing educational games in groups so that the material presented by educators is easily understood by students ([Rahayu et al., 2023](#); [Viola & Waldi, 2023](#)). This is also reinforced by the results which state that the use of an Articulate Storyline makes students feel more motivated and inspired so that they are more active and participate in learning ([Suhardiansyah. et al., 2023](#)). Students interact directly using Articulate Storyline 3 media because there are various menus to choose from, such as quizzes, which make students happy. Interactive media in the form of Articulate Storyline has practical menus that can add material by displaying various texts, images, videos, animations, and quizzes which make the appearance very attractive to students by using this media students can interact directly and present the material being studied ([Rahayu et al., 2023](#); [Triana & Amini, 2023](#)).

Based on data analysis in the form of paired samples tests and N-Gain tests carried out in small and large group trials, good qualifications were obtained. Therefore, the Articulate Storyline 3 media is effective for use in learning activities and can improve student learning outcomes in Natural and Social Sciences subjects through analysis of pretests and posttests. These results are relevant to the results of previous research. Research that has been conducted states that the Natural and Social Sciences learning media that has been developed using Articulate Storyline 3 in class IV elementary schools meets the criteria of being

very practical to use and feasible and effective for use in the learning process in the classroom and can improve student learning outcomes (Maivi & Erita, 2023; P. K. Sari & Hanif, 2023). Other research also states that an Articulate Storyline is very suitable and valid for use in delivering material in learning (Hidayah et al., 2023; Suhardiansyah. et al., 2023). The advantage of Articulate Storyline 3 media is that it displays various interesting images, sounds, and animations to motivate student learning. Apart from that, students can interact directly using this media, and makes it easier for students to understand the learning material.

This research implies that the Articulate Storyline 3 media that has been developed has received a very feasible category. Therefore, teachers can use this media in learning activities to help students understand the material easily, especially in the Natural and Social Sciences subject, material on cultural diversity in Indonesia, grade IV elementary school, so that student learning outcomes can be achieved optimally. With this learning media, students can easily understand the material presented by educators. The Articulate Storyline learning media is suitable for use by a teacher, which is useful for conveying learning material and helping students understand the material and can foster students' interest and interest in participating in the learning process (A. K. Putri et al., 2023; R. K. Sari & Harjono, 2021). A limitation in this research is the development of Articulate Storyline 3 media which can only be shared using HTML5 links by accessing it online. When students access the link, they must be connected to an internet network, students cannot access the media if there is no internet network. Then, educators also cannot know the value of the practice questions done by students and do not know who is using Articulate Storyline 3 media. Suggestions for further research are that the Articulate Storyline 3 media be further developed so that it can be accessed offline. Then, in practice questions, other applications can be used so that you can see the grades of students who have worked on them by combining other applications with Articulate Storyline 3 media.

4. CONCLUSION

This research produced the Articulate Storyline 3 media as a learning medium for the Natural and Social Sciences subject material on cultural diversity in Indonesia for class IV elementary schools. Students can interact directly and be more active in participating in the learning process because the Articulate Storyline 3 media has interactive quizzes in it. Media Articulate Storyline 3 has an attractive appearance with various colors, images, sounds, and animations so that students do not feel bored while participating in learning activities. It was concluded that the learning media based on Articulate Storyline 3 is very feasible and effective to use to improve the learning outcomes of fourth-grade elementary school students.

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