



The development of interactive media "Indonesian Culture" using articulate storyline 3 subjects IPAS grade IV in elementary school

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ABSTRACT

The development of interactive media for 'Indonesian Culture' is motivated by the limited variety of media used during IPAS learning. Students tend to pay less attention to the teacher's explanations and engage in noisy conversations with their classmates. Consequently, this lack of focus leads to a reduced understanding of the presented material. This study aims to develop media, outline the steps of development, and assess the feasibility of interactive media for 'Indonesian Culture' in IPAS subjects for fourth-grade Elementary School. This research is part of the Research and Development (R&D) research method using the ADDIE model (Analyze, Design, Development, Implementation, and Evaluation). Because the research focuses solely on product development, it does not carry out the implementation stage, and the evaluation stage is conducted at each step. The data collection technique employs an assessment sheet. The data analysis techniques used include qualitative and quantitative data. The trial design involves validation by media experts, material experts, learning experts, teacher assessments, and student responses. Based on the validation results, the media expert obtained an average score of 80 in the "Very Good" category. The content expert's assessment received an average score of 97.5, categorized as "Very Good." The evaluation from the learning expert resulted in an average score of 85, also classified as "Very Good." The assessment by the fourth-grade teachers yielded an average score of 90, categorized as "Very Good," and the responses by fourth-grade students obtained an average score of 95.83, falling under the "Very Good" category. Therefore, it can be concluded that the interactive media "Indonesian Culture" is highly suitable for use as a learning tool in the subject of IPAS for fourth-grade students.

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Introduction

Education is a meaningful effort to prosper a nation and state, as well as an effort to compete among other nations in terms of current technological developments (Ardiansyah et al., 2019). The government's strong desire to prosper the nation by making it a country that

has quality and competitiveness, as explained in the Education System Law Number 20 of 2003 Article 1 which reads "Education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious strength, self-control, personality, intelligence, noble character, and skills needed by themselves, society, nation and state".

Technological developments encourage many changes, one of which is in the world of education, this development has been clearly seen since the 2020 pandemic which requires carrying out learning activities from home making students from elementary school to university students spend more time with devices and other technology. This affects the learning system to change from classroom learning to online learning (in the network) by utilizing technological sophistication in the form of using digital-based learning media in the form of audio visual, classroom, e-learning and the like. According to Anggraeny et al. (2020), learning using technology serves to make it easier for students to understand and explore learning concepts and can increase the enthusiasm for learning. So that the learning provided to students must generate student interest so that students have enthusiastic participation in teaching and learning activities.

Educators can utilize technology as a learning medium or mediator in conveying knowledge to students through various applications (Agustian & Salsabila, 2021). The use of technology as a medium in education also has a significant influence on the interaction patterns of teachers and students, students who on average have good technological literacy tend to get bored faster when learning runs conventionally (Junaidi, 2019). So it is necessary to develop information technology-based media to support the implementation of learning activities at school. According to Anggraeny (2020) Learning using technology serves to make it easier for students to understand and explore learning concepts and can increase the enthusiasm for learning, because the material presented attracts the attention of students, therefore learning media is one of the technological developments in the world of education as a tool for teachers to convey material in learning.

Before developing a learning media, a needs analysis is required. The development of a learning media is carried out in several stages, adjusted to the instructional design that will be used. In general, the initial stage in the learning media development process is to conduct a needs analysis (Negara et al., 2019). Needs analysis is a systematic process for determining goals, identifying actual and expected conditions, and prioritizing actions. Needs analysis in developing learning media is carried out to determine student assessments of the learning media used and expectations of the learning media to be created (Tambunan, 2021). In this

case, student needs analysis, material analysis, and media needs analysis are carried out using observation and interview methods.

Student needs analysis is conducted to find out the needs that need to be presented in learning and find out the problems that exist in the IPAS learning process. Student needs in learning include three aspects, namely 1) Readiness to learn, 2) Interest and 3) Learning style. Based on the results of observations and interviews conducted on May 10, 2023 with Mr. Subari, S.Pd as the fourth grade teacher of SDN 4 Trimoharjo, it was found that during learning the teacher only used printed media such as posters, pictures, teacher books and student books available at school. The use of learning media that is less varied and interesting tends to make students bored and less excited during learning. Some students do not pay attention to the material or explanation delivered by the teacher. This can be caused by several factors, such as students doing other work outside the subject, students who are noisy chatting with their classmates, and some students who do not understand the material presented, this can be seen when the teacher asks questions with students, some of them forget the material presented. Teachers in their role as educators are not just teaching knowledge but are able to create learning conditions that are encouraging and attractive. Learning that is still teacher-centered makes students unable to capture the material clearly because the teacher conveys the material less supported by relevant learning resources, so that the material received by students is still abstract.

Material analysis, the material in the IPAS subject is not mere memorization, but more than that, it presents universal concepts through analysis of individuals and their environment. The material has a series of social science studies in which it explains the diversity of different types of tribes, cultures, ethnicities, races, religions and customs in Indonesia. In IPAS subjects in class IV, the material Indonesiaku is rich in culture has learning outcomes, namely, describing the diversity of cultures and local wisdom of their respective regions, knowing how to preserve culture and local wisdom, knowing the benefits of cultural heritage and local wisdom. In this material, students are expected to be able to learn about cultural diversity and local wisdom in their respective places of residence. Preserving existing cultures and having tolerance for different cultures.

Media needs analysis, students at the age of 9-10 years or during grade IV elementary school still tend to want to play, are more interested in games, pictures, colors and animation. IPAS subjects, especially the material of my rich culture is delivered through lectures that focus on the teacher. Students feel bored with learning that only listens to the material delivered by the teacher. Therefore, media development is needed that will make learning

more interesting. According to Mardan (2019) by utilizing the media in learning activities, considering the many functions of the media in learning activities, among others, can visualize events that occur in society, can arouse student motivation, can function all the senses of students, and can bring the world of concepts closer to reality.

Based on the above problems, it can be concluded that there is a need for the development of learning media in the subject of IPAS material My Indonesia is rich in culture. To help students understand the material easily.

Articulate storyline 3 is presented as an easy and fun interactive learning media maker software. Its simple appearance and resemblance to Microsoft Powerpoint, allows ordinary teachers to create interactive learning media more easily. Making learning media does not require a programming language / script, the existing tools are very easy to understand and similar to other interactive media maker software (Gunawan et al., 2022). According to Pratama (2018) was conducted by developing Articulate Storyline in the form of a graphic image tutorial which in the media only uses images and text in delivering the material. While Hidayatullah & Rakhmawati (2016) research in developing this software researchers used a combination of graphics and images in delivering the material. In contrast to the two previous studies, in this study, the development of interactive media articulate storyline 3 will combine not only images and text but also the use of audio and animation in the development process. The addition of components in the development of articulate storyline interactive media will produce more interesting interactive media.

Method

The type of research conducted is Research and Development (R&D). The development model used in the research is the ADDIE model from Branch. In the research steps described by Branch, the ADDIE model consists of 5 stages, namely Analyze, Design, Development, Implementation, and Evaluation evaluation. In this study, it was only carried out until the product development stage in the form of interactive media "Indonesian Culture" and was only tested on a limited basis, therefore this research with the ADDIE model was only sufficient until the Development stage. The ADDIE model development research carried out only up to the Development stage, because the purpose of this research is only limited to developing and producing a valid learning media (Setiawan et al., 2021). Based on what has been described by Setiawan's that this development is only carried out until the development stage because the purpose of this research is only limited to producing a valid or feasible media due to time constraints and research restrictions, this research does not use the

implementation stage because implementation is for effective testing of a product, namely on a large scale. The types of data used are qualitative data and quantitative data. Data collection instruments used assessment sheets which included validation sheets for material experts, media experts, learning experts, teacher assessment sheets, and student responses. The data analysis technique used was qualitative data analysis and quantitative data analysis. Data analysis of media expert validation sheets, material experts, learning experts and teacher assessments is measured using a Likert scale which has a category of value ranges from low to high ranges. See table 1.

Table.1 Likert Rating Scale

<i>Category</i>	<i>Score</i>
Very Good	4
Good	3
Enough	2
Not Good	1

While the data from the student response assessment sheet was carried out on a guttman scale. According to Sugiyono (2019), this type of measurement scale will get a "yes-no" answer. "true-false", "ever-no", "positive-negative" and others.

Table.2 Guttman Rating Scale

<i>Category</i>	<i>Score</i>
Yes	1
No	0

If the assessment has been carried out by experts, teachers, and student responses, then the scores obtained are calculated using the following formula.

$$N = \frac{\text{Amount obtained}}{\text{total maximum score}} \times 100$$

After knowing the percentage value, then the value is presented into the assessment criteria, namely very good, good, sufficient, less and very less. In accordance with Sugiyono's opinion (2019).

Table. 3 Rating Category

<i>Skor</i>	<i>Criteria</i>
>81-100	Very Good
>51-80	Good
>21-50	Enough
>20	Not Good

If all data has been obtained from experts, teachers and students, the next step is to calculate the average value using the following formula.

$$\text{Average value} = \frac{\text{Total score}}{\text{Number of assessors}} \times 100$$

The media is said to be successful if it reaches a score of 51-80 in the "Good" category. So that the interactive media "Indonesian Culture" is suitable for use.

Results and Discussion

The development of interactive media "Indonesian Culture" uses the ADDIE development model, namely analyze, design, development, implementation, evaluation. However, because the research only focuses on product development, this research does not carry out the implementation stage and for the evaluation stage carried out at each stage.

The first stage in media development is analyze. The development of a learning media is carried out in several stages, adjusted to the instructional design that will be used. In general, the initial stage in the learning media development process is to conduct a needs analysis (Negara et al., 2019). Needs analysis is the initial process of activities to obtain information about existing problems in the learning process. The needs analysis is carried out with the aim of identifying problems encountered by students and teachers in the learning process in the classroom, with the aim of knowing the level of urgency of the problem whether it needs to be developed or not. So that the learning media that will be made is more in accordance with existing needs based on the problems identified through the needs analysis (Astuti, 2022). In this case, student needs analysis, material analysis, and media needs analysis were carried out using observation and interview methods.

The second stage is design. The planning stage begins with developing an outline or design related to the content that will be displayed in the media. The outline of the media content is displayed in the form of a storyboard. The storyboard serves as a guide to facilitate the process of making media so that it is well structured.

The third stage is development. The development stage in the ADDIE development model is carried out by developing what has been designed at the design stage. The research product developed is in the form of interactive media articulate storyline 3 "Indonesian Culture" in which there is material about Indonesia's rich culture and media products meet the criteria for validated learning media indicators. The media developed will later be tested for quality by media experts, material experts, learning experts and tested on a limited basis to students and teachers.

Table.3 Data from Expert Validation Test Result

No.	Assessment	Score	Category
1	Media Expert	82,5	Very Good
2	Materials Expert	97,5	Very Good
3	Learning Expert	85	Very Good
	Amount	265,3	
	Scor	88,43	
	Category	Very Good	

After validation by experts, the next stage is the Small Group Trial stage to 12 fourth grade students of SDN 4 Trimoharjo and one fourth grade teacher.

Table.4 Student Response Result Data

No.	Assessment	Score	Category
1	Student Response Sheet	95,83	Very Good

Table.5 Teacher Assessment Result Data

No.	Assessment	Score	Category
1	Teacher Assessment Sheet	90	Very Good

Based on the results obtained, the final score of the expert validation assessment, student responses, and the fourth grade teacher assessment is known as follows.

Table. 6 Media Quality Assessment Result Data

No.	Assessment	Score	Category
1	Expert Validation	88,43	Very Good
2	Student Response	95,83	Very Good
3	Teacher Assessment	90	Very Good
	Amount	274,26	
	Score	91,42	
	Category	Very Good	

Based on the table above, the results of the assessment given by expert validators, teacher assessments and student responses to interactive media products "Indonesian Culture" with a total score of 91.42 are included in the "Very Good" category for use.

The fourth stage is implementation. In this implementation stage, it is a stage to implement the media products that have been developed in a real classroom situation. During implementation, the media products that have been developed are applied to actual conditions. In this development research, the implementation stage is only carried out on a small scale and does not apply to several schools due to time constraints and research

restrictions.

The fifth stage is evaluation. The evaluation stage is carried out at each stage for product improvement needs. This evaluation stage is by analyzing the data obtained during the development process obtained from the validation assessment sheets of media experts, material experts and learning experts, as well as teacher and student response assessment sheets. The results of the data analysis obtained in the form of assessments, suggestions, input to be used in making revisions, so as to produce the final product of interactive media "Indonesian Culture" which is feasible as a learning media for grade IV elementary school students. Suggestions from media experts are; (1) adding a media cover; (2) adding some image illustrations to the material; (3) improving the placement of the home button position; (4) adding audio to the media.

Suggestions and input from material experts, namely; (1) not all provinces have entered. While suggestions from learning experts, namely; (1) Adjusted models and methods; (2) add question grids and question answers..

Conclusion

Based on the results of research and development of interactive media "Indonesian Culture", it can be concluded that the development of interactive media "Indonesian Culture" developed using the ADDIE development model, namely analyze, design, development, implementation, evaluation. Based on the results of the media expert assessment obtained an average score of 80 in the "Very Good" category. The material expert assessment obtained an average score of 97.5 in the "Very Good" category. The assessment of learning experts obtained an average score of 85 in the "Very Good" category. The assessment by the fourth grade teacher obtained an average score of 90 in the "Very Good" category and the response of fourth grade students obtained an average score of 95.83 in the "Very Good" category. So it can be concluded that the interactive media "Indonesian Culture" is very feasible to use as a learning media in IPAS class IV subjects.

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