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Designing and Developing E-Magazine about Indonesian Cultural Concept in Social Studies Learning for Elementary School Students

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Abstract

The background of this research revolves around the optimization of teaching materials related to cultural diversity, cultural tourism, and special food in Indonesia, targeting fourth-grade students in Social Studies at the elementary level (SD). This optimization is accomplished through the utilization of the digital media known as 'Anak Bangsa' e-magazine. The adoption of 'Anak Bangsa' e-magazine as a learning medium is in response to the limited use of educational media during the teaching and learning process and a declining appreciation for cultural preservation. The primary objective of this study is to create a product in the form of an e-magazine, 'Anak Bangsa,' designed for fourth-grade Social Studies, with a specific focus on cultural diversity. To achieve this, the research followed the Design and Development method, implementing the ADDIE model (Analysis, Design, Development, Implementation, Evaluation). The research employed a range of instruments, including questionnaires to validate the material with the input of experts in the fields of material content, media, and linguistics. Additional questionnaires were used to gather feedback from both teachers and students. Interviews were also conducted with educators and students. The research resulted in the development of the 'Anak Bangsa' e-magazine as a learning medium featuring content on cultural diversity, tailored for fourth-grade students at the elementary level. The outcome of the feasibility test, carried out through expert validation involving material experts, media experts, and language experts using a validation questionnaire, yielded a rating of "Very Feasible." Furthermore, the assessment recapitulation based on feedback from both educators and students also placed the learning medium in the "Very Feasible" category. As a result, the 'Anak Bangsa' e-magazine for Social Studies material on cultural diversity, as developed, is deemed a suitable alternative medium for teaching Social Studies to fourth-grade elementary school students.

Keywords: E-Magazine, Learning Media, Social Studies Learning in Elementary Schools

INTRODUCTION

Education is currently faced with challenges to realize excellence in the competitiveness of the nation's children. Education is a learning process that includes the development of three domains,

namely cognitive, psychomotor, and affective, which is carried out regularly and consciously to stimulate the potential possessed by students so that they can develop. 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 and spiritual strength, self-control, personality, intelligence, noble character, and the skills needed by themselves, society, nation, and state (UUSPN No. 20 of 2003).

Through education, the Indonesian nation can produce intelligent generations to produce quality human resources in Indonesia. Over time, education continues to keep up with the changing times. Now, education is at a point where it is preparing the nation's generation to be ready to face the digital era of 4.0. In this digital era, science and information technology are developing rapidly. As technology develops, this indicates that the process of globalization is happening.

National education was put forward by Ki Hajar Dewantara, namely education carried out to return and elevate the existence of the Indonesian nation to become a nation with dignity. Education also aims to liberate and advance national culture in shared life (Herlambang, 2018). Elementary school education is a process at the early education level to form quality human resources ready to face the digital era 4.0. Early education in elementary schools' measures success at the next school level. One of the lessons in primary education is social studies learning.

According to Mutakin (Supardi and Saliman, 2004), the social studies learning objectives are to develop students' high sensitivity and curiosity towards social problems that occur in society to have a positive mentality towards efforts to fix all issues that arise and has a skilled attitude in dealing with any problems that occur daily, or that befall himself or that befall society.

Social Science material in fourth grade is very diverse, one of which is cultural diversity, which is listed in Chapter 6 in the student book and teacher's book for fourth grade IPAS (Natural and Social Sciences) with the first printing of 2021 published by the Ministry of Education and Culture. This cultural diversity material is material that students must learn. It is due to Dewantara's understanding culture is the foundation or basis of education, the nature of culture itself is subtlety, nobility, and advances human civilization (Herlambang, 2018).

Conveying learning about cultural diversity in science lessons to students requires communication media that can attract their interest. One of the factors in the success of a learning process is interest in learning. Interest is a habit that remains in paying attention and participating in interesting activities. Activities of interest and constant attention are intense, are accompanied by curiosity, and do not feel burdened (Slameto, 2015).

Several learning components must be met in a learning process: objectives, learning resources, learning strategies, learning media, and learning evaluation. Learning is an interaction process between educators and students by covering learning components. Learning itself can produce learning outcomes for students, while learning outcomes are outlined in the four pillars of learning according to UNESCO (in Rusman, 2017), namely learning to know by learning to acquire, deepen, and utilize knowledge. Learning to do to be able to adapt to society, every individual needs to learn to work. Learning to live together in global life must be able to interact, communicate, work together, and live together. Learning to be in each individual is required to develop all aspects that exist in himself to become a complete self. We can develop learning media to be more creative and innovative in attracting students' interest in learning and increasing student learning motivation. Learning media need to be adapted to the learning styles of students. Richard Bandler, John Grinder, and Michael Grinder, in their work Neuro-Linguistic Programming (NLP), stated that learning characteristics are generally divided into three groups: visual, auditory, and kinesthetic (Mufidah, 2017).

Concerning innovative learning, in the 21st century, rapid technological developments support a more innovative learning process. The learning media used in 21st-century learning is inseparable from the TPACK (Technological Pedagogical Content Knowledge) component. Mishra and Koehler (in Rahmadi, 2019) said that TPACK is a new type of knowledge that educators must master to integrate technology into learning properly. The role of educators in applying TPACK to learning media is crucial.

It is in line with Permendiknas Number 16 of 2007, which states that one of the competency standards for elementary school teachers is to utilize information and communication technology for learning purposes. The development of this e-magazine media is related to the application of learning

to make it more varied. The development of this digital media collaborates with the TPACK components and is adapted to the characteristics of students. This e-magazine media is a product of technological advances in communication and information. The developed e-magazine media will facilitate students' learning styles by presenting attractive images, audio, and persuasive text. It is because attractive images have a significant role in the life of the children's world, which functions to make children have strong knowledge and can make them more self-confident (Gonen and Guler, 2011). Seeing the problems described, an innovation was created to design and create a learning media in Social Sciences subjects with the concept of Indonesian Culture packaged as a Digital Magazine or E-Magazine. This digital magazine is a product of technological advances in communication and information. The title of this study is "Designing and Developing E-Magazine about Indonesian Cultural Concepts in Social Studies Learning for Elementary School Students". In designing e-magazine media, researchers can determine the feasibility of media created through validation from material experts, media experts, linguists, user responses, educators and students. The design of this media is expected to increase the enthusiasm for learning of students and foster a sense of love for the motherland and an attitude of tolerance. It is also hoped that this media can be used well and motivate educators to develop more varied, innovative and interactive learning media.

METHOD

The research method used in this research is Design and Development (D&D). Richey and Klein (in Rusdi, 2018) say that design and development research is a systematic research method regarding product design, development and evaluation related to new products or product development already available. Development research in education is a research method that contains three components: development models, development procedures, and trials of models or products from these developments (Puslitjaknov Team, 2008). The research procedure used in this study is to use the ADDIE model. Lee and Owen (in Rusdi, 2018) argue that the main ADDIE framework has systematic and specific steps. The main framework in ADDIE (Analysis, Design, Development, Implementation, and Evaluation).

Step I: Analysis

The initial stage of this research with the application of the ADDIE model is the analysis stage. The stages of this analysis include analysis of the learning curriculum, analysis of learning media needs, analysis of material content, and analysis of student characteristics. Analysis of the learning curriculum so that the material in the media is adapted to the current curriculum. Analysis of the needs of learning media is carried out so that the media is made according to the school's or student's needs. Material content analysis is used so that the material listed in the media is in accordance with the curriculum. The analysis of the characteristics of the participants aims to make the learning media in accordance with the characteristics of the students.

Step II: Design

The next stage is the design stage. This design stage includes product specifications, determining the material, making GBPM (Media Program Outline) for planning the developed learning media, creating storyboards to facilitate learning media development to understand the flow of the development concept and determining the software used.

Step III: Development

The next stage is the development stage. This development stage contains the realization of product design activities. At this stage, the design stage is made to be shown in visual form. This stage begins with collecting material and multimedia. Next is designing the media in the Canva application according to the material that has been determined. After that, continue adding features using the Flip PDF Professional application. Additional features include links, images, audio, and text. After the features are added, the next step is to publish online on the application. The next step after publication will generate a link to access the feasibility of the learning media developed before being tested. The experts will assess the media being developed and then provide suggestions for improving the media. After the expert validates the product and provides suggestions, the product is repaired and then consulted again until the media is declared to be tested on educators and students.

Step IV: Implementation

The next stage is the implementation stage. In this implementation stage, a trial was carried out on the developed product to find out how educators and students responded to using the media. The developed media was tested on fourth-grade elementary school students.

Step V: Evaluation

At this stage, the media was evaluated based on the results of evaluating the responses of educators and students. The evaluation results are used for follow-up of the learning media that has been developed.

The method used to measure the level of validity, be it in the material, media or language used, is using a Likert scale. The criteria on the Likert scale, according to Sugiono (2018), namely:

Table 1. Likert Scale Category

Score	Category
1	Very Less
2	Less
3	Good
4	Very Good

The formula used for media development research is as follows:

$$P_s = \frac{S}{N} \times 100\%$$

P_s = Percentage

S = Number of Scores obtained

N = Total Ideal Score

The score obtained is then presented so that it can be analyzed to determine the level of practicality of the media developed with the following feasibility interpretation criteria:

Table 2. Score Interpretation

Score Rate (%)	Category
0-20	Not Feasible
21-40	Less Feasible
41-60	Fairly Feasible
61-80	Feasible
81-100	Very Feasible

RESULTS AND DISCUSSION

This study developed learning media products in the form of e-magazines with material on cultural diversity, special foods, and cultural tourism in social studies for fourth grade students using the ADDIE research model.

Analysis

In the analysis phase, interviews and literature studies were carried out. Interviews were conducted with fourth-grade teachers at SDN 075 Jatayuregarding media needs and student characteristics. Meanwhile, a literature study analyses the curriculum and material content. The interviews with fourth-grade teachers show that learning media with innovations is urgently needed. Meanwhile, the interview results related to the students' characteristics showed that the existing characters were diverse. Differences in capturing learning material: some are fast and slow, which has become an obstacle to learning. Apart from that, the learning media used so far has not involved digital media

much. The results of the literature study are that the current curriculum is independent. So, the development of e-magazine media is adapted to the independent curriculum, which in the Social Science content is contained in the IPAS (Natural and Social Sciences) subject.

Furthermore, an analysis of material on cultural diversity was carried out in student books and teacher books of Natural and Social Sciences (IPAS) fourth grade, published in 2021 and published by the Ministry of Education and Culture. The results of the analysis of the Science students' book on cultural diversity material were narrowed down into two topics. It is due to the short research time so that discussion in the media can be maximized. The cultural diversity material discussed in the media is typical food and cultural tourism icons for each region. The selection of typical food materials and cultural tourism icons is also important since both of them have become the identity of the Indonesian state on the world stage apart from that, students can also know the history of food and cultural tourism icons around where they live.

Design

This design stage begins with making product specifications as an initial plan for making e-magazine learning media. The resulting product is in the form of an electronic magazine which contains cultural tourism materials and special foods. Next is to determine the material based on the learning outcomes contained. After that, it is continued by making GBPM plan the developed learning media. Next is creating storyboards to facilitate development to understand the flow of the e-magazine concept. The last step in this design stage is to determine the software used. The software to develop this e-magazine media uses Canva, Flip PDF Professional, and the Bit.ly Website.

Development

The design is realized in this development stage as a link to an electronic magazine product. This stage begins with collecting material and multimedia. Next is designing the media in the Canva application according to the material that has been determined. The material in this e-magazine media contains why Indonesia has a diverse culture, 34 cultural tourism and special foods, ways to preserve culture, respect, and the benefits of cultural diversity. After that, continue adding features using the Flip PDF Professional application. Additional features include links, images, audio, and text. After the features are added, the next step is to publish online on the application. After being developed, the next stage is the validation stage, carried out by three experts: material experts, media experts, and linguists. This stage aims to measure the feasibility of the developed media. The developed media was then validated by Mrs Yona Wahyuningsih, M.Pd., as a material expert, Mr M. Ridwan Sutisna, M.Pd., as a media expert, and Mrs. Dr. Kurniawati, M.Pd. as a linguist. The validation results are presented in the following table:

Table 3. Validation Result

Reviewer	Material Expert	Media Expert	Linguist
Content	Content	Technical Quality and Design	Language
Score	100%	75%	81,25%
Total Score	85,41%		
Interpretation	Very Feasible		

Implementation

The e-magazine learning media in this study was tested on 26 students and one teacher as a homeroom teacher for fourth grade at SDN 075 Jatayu. The implementation phase of this trial was carried out face-to-face at SD Negeri 075 Jatayu. The trial was carried out using a face-to-face

learning model. Learning begins with an opening prayer together, after which ice breaking is carried out using the "guava tree attitude", followed by apperception activities and delivery of learning objectives. The implementation of the core activity begins with students being asked to state the origin of each province. After that, the Anak Bangsa e-magazine media was introduced using projector technology. One by one, the pages are discussed and shown to students. Sometimes, students are asked to read the explanations in the e-magazine. After each discussion of a province, students are invited to discuss. The e-magazine media discussion is over, and then students are invited to work on the quiz in the media. After that, the lesson was closed by conveying the conclusions and benefits of learning at that time. Filling out the questionnaire is done at the end of the lesson. When finished, the lesson was closed with a joint prayer activity. Evaluation of e-magazine learning media by educators has two aspects, namely content/material and media quality. These aspects were then developed into several indicators, namely accuracy, completeness, student interest, usability, and display quality, for educators' assessment of e-magazine learning media.

Table 4. Educator Assessment

Aspect	Percentage	Category
Content	90%	Very Feasible
Media	100%	Very Feasible
Total	95,83%	Very Feasible

Student responses were made to 26 people in fourth grade SDN 075 Jatayu. There are two aspects to the response to e-magazine learning media: content/material and media. The following are the results of students' responses to e-magazine learning media.

Table 5. Students' responses

Aspect	Percentage	Category
Content	95%	Very Feasible
Media	92,03%	Very Feasible
Total	93,27%	Very Feasible

Evaluation

This stage is carried out to assess the analysis, design, development, and implementation stages. The evaluation stage in this study was carried out at each stage that had been implemented. This evaluation stage is related to the implementation stage, in which researchers evaluate the process of developing the Anak Bangsa e-magazine as digital media. The shortcomings that need to be developed further in the development of the next e-magazine are the need to add more diverse audio and video to cater to all students' learning styles.

CONCLUSION AND SUGGESTION

Conclusion

The Anak Bangsa e-magazine design is digital media which includes multimedia (text, images and audio). The Anak Bangsa e-magazine media contains material about cultural diversity in cultural tourism and Indonesian specialities. Emagazine media can also be accessed via PC/Laptop or Android. The results of the feasibility test of the Anak Bangsa e-magazine media through a validation test by material experts, media experts, and language experts show that the results obtained from each expert can interpret that the Bangsa e-magazine media is in a very suitable category to be used as a tool for social studies learning. In fourth grade elementary school, especially on the subject of cultural diversity. The response of educators and students through the e-magazine media trial showed good results in which scores were obtained in the very feasible interpretation category, which showed that e-magazine media was very feasible to be used as a tool in social studies learning in fourth grade SD, especially on the subject of cultural diversity.

Suggestion

The implications of the media produced through this research are as follows: ‘Anak Bangsa’ e-magazine media for material on cultural diversity in social studies fourth grade SD was developed in accordance with learning outcomes, learning objectives, and materials listed in the 2022 independence curriculum. It makes the media suitable for use in learning. Anak Bangsa's e-magazine media on cultural diversity material in Social Studies fourth grade SD was developed to assist teachers in conveying cultural diversity material through e-magazine media. Anak Bangsa's e-magazine media material on cultural diversity in social studies fourth grade SD can attract students' interest. It makes the material easier for students to understand. Recommendations that can be expressed by the author in this case based on the findings of the research that has been carried out include the following: Educators can use the ‘Anak Bangsa’ e-magazine media as an alternative media in social studies learning with cultural diversity material in fourth grade SD. Schools can provide support regarding the use of multimedia in delivering material. This support can also be done by holding training on making digital-based learning media. Researchers who will further develop media with material on cultural diversity in social studies fourth grade SD should be able to develop media by exploring using other types of applications. It is to produce better and more attractive digital-based media.

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