

Socio-Cultural Diversity in The Form of Digital Comics for Fourth Grade Students: Validity and Feasibility

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ABSTRAK

Tampilan buku yang kurang menarik membuat siswa jenuh dalam belajar. Sehingga perlunya penerapan media pembelajaran yang mampu membantu siswa dalam memahami konsep yang bersifat abstrak contohnya seperti komik digital. Penelitian ini bertujuan untuk mengembangkan media pembelajaran komik digital pada topik keberagaman sosial budaya siswa kelas IV SD. Subjek penelitian ini adalah media komik digital dan objek pada penelitian ini adalah validitas media komik digital yang telah dikembangan. Penelitian ini menggunakan metode kuesioner dengan memberikan instrumen lembar penilaian yang diberikan kepada 2 dosen uji ahli media, 2 dosen uji ahli materi, dan 2 guru sebagai praktisi. Instrumen yang digunakan untuk mengukur validitas media komik digital adalah rating scale berupa lembar penilaian media komik digital dari ahli. Data yang didapatkan kemudian dianalisis dengan menggunakan rumus mean untuk mengetahui rata-rata skor validitas media komik digital. Hasil nilai rata-

rata validitas media komik digital yang diperoleh dari ahli materi terdapat rata-rata skor validasi secara keseluruhan adalah 4,8, ahli media terdapat rata-rata skor validasi secara keseluruhan adalah 4,8 dan ahli praktisi terdapat rata-rata skor validasi secara keseluruhan adalah 5,7 dengan kualifikasi sangat baik. Berdasarkan dari hasil analisis tersebut maka dapat dikatakan bahwa media komik digital yang dikembangkan pada topik keberagaman sosial budaya dinyatakan valid dan layak digunakan dalam pembelajaran siswa.

ABSTRACT

The appearance of the book that is less attractive makes students bored in learning. So the need for the application of learning media can help students understand abstract concepts, such as digital comics. This study aimed to develop digital comic learning media on the socio-cultural diversity of fourth-grade elementary school students. The subject of this research is digital comic media, and the object of this research is the validity of the digital comic media that has been developed. This study used a questionnaire method by providing an assessment sheet instrument given to 2 media expert test lecturers, two material expert test lecturers, and two teachers as practitioners. The instrument used to measure the validity of digital comic media is a rating scale in an expert's digital comic media assessment sheet. The data obtained were then analyzed using the mean formula to determine the average validity score of digital comic media. The results of the average validity score of digital comic media obtained from material experts, there is an average validation score as a whole is 4.8, media experts have an average overall validation score of 4.8 and expert practitioners have an average validation score overall is 5.7 with very good qualifications. Based on the results of this analysis, it can be said that digital comic media developed on the topic of socio-cultural diversity are declared valid and suitable for use in student learning.

1. Introduction

The social studies learning process in elementary schools has been integrated with other material content to become a theme as the 2013 curriculum is implemented. However, the social studies content learning process should still prioritize the meaningful learning process by developing high-level thinking

skills of students. The social studies learning process is directed at cultivating and developing students' critical and creative thinking skills (Nurhasanah, 2016; Melinda et al., 2017). It will be achieved if the learning process is carried out with various innovations, including models, methods, and learning media following students' and materials' characteristics. Efforts can be made to optimize social studies learning outcomes, namely the need for a student-centered learning process and the need to use learning media to increase students' learning interest and motivation (Alannasir, 2016; Fajrin, 2018).

However, the learning process, especially the social studies content, has not been implemented optimally. The fact is that teachers have used models, methods, and learning media as an effort to improve the quality of learning, but they realize that these efforts have not been maximized due to limitations in understanding the use of models, methods, and the learning media itself. Some of the problems found in the social studies content learning process, namely: 1) the material presented has not been linked to daily life, so it lacks meaning, 2) the use of learning media is still lacking (Meiharty, 2018; Jauhar & Nurdin, 2017; Ratri, 2018). In addition, the results of interviews that have been conducted with fourth-grade teachers of SD Gugus VI, Kecamatan Buleleng, 2020/2021 school year, it is known that the material on the topic of socio-cultural preservation, which is the content of social studies, is still very limited. There are no media that can be used to facilitate the presentation of this material. With the existence of Covid-19, the learning process cannot be carried out face-to-face like in class so that students carry out learning online (Abuhammad, 2020; Bdair, 2021; Dwijayani, 2019; F. M. Rohmanurmeta & & Dewi, 2018). So that the learning process tends to take place in one direction with the teacher as a source of information (Mishra et al., 2020). If these problems are not resolved immediately, the learning objectives, namely to develop students' high-level thinking skills, will not be achieved. In the end, it will affect the low quality of education itself.

Following these circumstances, there is a need for changes and innovations in the learning process to make it more enjoyable, meaningful and encourage students' abilities. One way that can be done is by developing media in learning. One type of learning media that makes learning fun, meaningful, and encouraging is digital comics. The comic is an arrangement of images in a certain sequence, which includes characters who have characters in a series of stories to provide an element of entertainment in the delivery of messages (Riwanto & Wulandari, 2018). Comic media has a quick and keen understanding of a comic story (Karthika Devi et al., 2020). Meanwhile, another opinion explains that digital comics are pictorial stories to achieve a message arranged in such a way complete with its characters and presented via electronic media. (Andriani, 2019; Yuliana et al., 2017). The use of digital technology in the learning process can improve the quality of learning (Jahnke et al., 2017; Purvis et al., 2020). From some of the opinions above, it can be defined that digital comics are image media containing word balloons and image illustrations to convey information through computer-designed images then digitally designed. Digital comics were chosen because they have advantages worthy of being used as a learning media, such as creating student interest, making the material more interesting, helping students understand abstract concepts and storylines that cover the entire learning system material and learning tools. The material presented is packaged into illustrated storylines. The use of media can be used in class or outside the classroom, making it easier for students to use digital comic learning media to learn independently without instruction from the teacher (Kanti, 2018). In addition, the results of the study stated that digital comic media had a positive influence on increasing critical thinking, interest, and student learning outcomes (Widana et al., 2018; Sukmanasa et al., 2017; Rohmanurmeta & Dewi, 2018).

As for those who support research that has been developed by other research that several researchers, namely have carried out: First, electronic comic media can improve understanding of marine conversion for children aged 7-8 years, the media developed is a computer-based multimedia type that uses comic life, shaped like an electronic book (Syarah et al., 2018). The second researcher shows that the development of digital comic media in the basic competencies presented in the form of the video was chosen because it has advantages that are worthy of being used as a learning media such as, the material presented is more interesting and can help students understand abstract concepts (Kanti et al., 2018). The third researcher states that digital comics in social studies based on validation by material experts, media experts, and teacher and student responses are appropriate to increase student interest in learning (Sukmanasa et al., 2017). The fourth researcher stated that digital comic media is suitable for the learning process because there are visual elements (Salahuddin et al., 2019). The fifth researcher stated that digital comic media is appropriate to be used as a reflection of youth in the use of social media (Pravitasari et al., 2017). The digital comic media developed in this study have differences compared to other digital comic media. The difference lies in the topic taken, namely the topic of socio-cultural diversity in the fourth grade. The purpose of this research is to develop digital comic media on the topic of socio-cultural diversity of fourth-grade elementary school students whose validity has been tested so that it can be applied in the field and impact the quality of the process and student learning outcomes..

2. Method

This research was development research that produces a product. The product developed in this study was a learning media on socio-cultural diversity in digital comics. The model used in this study was the ADDIE (Analyze, Design, Development, Implementation, Evaluation) model. These stages can be explained as follows. The Analyze stage includes several stages: curriculum analysis, student characteristic analysis, needs analysis, and media analysis. The planning of instructional media design starts from determining the material developed in digital comic media, making a virtual comic media design, and then showing the supervisor to get input or suggestions for improving the media. The development stage of development was carried out by developing digital comic media on fourth-grade socio-cultural diversity, then consulted with the supervisor for input or suggestions for improving digital comic media. Meanwhile, the implementation and evaluation stages were not carried out due to time, resource, and financial constraints. Subjects in this development research were competent in their fields. The experts consisted of 2 material experts, two media experts, and two practitioners. Furthermore, in product testing, due to situations and conditions that are not possible. This trial was carried out to determine the validity of the media that had been developed. Product trials were used with reviews by several experts, including media experts, material experts, and practitioner experts.

Furthermore, the data collection method used was a questionnaire method, by providing a list of questions or statements to the respondent. The questionnaire method used to collect data on the validation results of digital comics by experts. The data collection instrument used in this development research was the rating scale. Rating Scale is raw data in the form of numbers which is then interpreted as descriptive. The rating scale instrument used was the digital comic assessment sheet. The validity was ensured through several stages: 1) making grid tables, 2) consulting with supervisors, 3) developing instruments. The instrument validity grid includes material or content aspects, language or communication aspects, presentation aspects, voice and text aspects, visual aspects, characterization aspects, and overall performance aspects. The validation sheet and digital comic media validation instruments are presented in Tables 1, 2, and 3.

Table 1. Digital comic media validity sheet for material experts

No.	Aspect	Dimention	Number	Total
1	Material /	Completeness and clarity in conveying	1, 2	2
	content	identity		
		The delivery of clear learning objectives	3	1
		Deliver material clearly	4, 5, 6, 7, 8,	5
2	Language /	The suitability of using language rules	9, 10, 11	3
	Communication	Use language that is easy for students to understand	12	1
3	Presentation	Go to sequence in the presentation	13, 14	2
		Integrity in presentation	15	1
Tota	l			15

Table 2. Digital comic media validity sheet for media experts

No.	Aspect	Dimention	Number	Total
1	Voice and text	Text is presented clearly	1, 2	2
		Sound is presented clearly	3, 4	2
2	Visual	Illustrations are presented clearly	5, 6	2
		Interesting background display	7, 8	2
		The combination in the use of colors	9, 10	2
3				
4	Characterization	Selection of character	11, 12	2
		The attractiveness of character	14	1
5	Overall	Overall appearance integration	14, 15	2
	Appearance			
Total 15				

Table 3. The validation sheet for practitioners' digital comic media

No.	Aspect	Dimention	Number	Total
1	Material / content	Completeness in conveying identity	1, 2	2
		The delivery of clear learning objectives	3	1
		Deliver material clearly	4, 5, 6, 7, 8,	5
2	Language /	The suitability of using language rules	9, 10, 11	3
	Communication	Using language that is easy for students to understand	12	1
3	Presentation	wrinkles in presentation	13, 14	2
		Integrity in presentation	15	1
4	Voice and text	Text is presented clearly	16, 17	2
		Sound is presented clearly	18, 19	2
5	Visual	Illustrations are presented clearly	20, 21	2
		Interesting background display	22, 23	2
		The combination in the use of colors	24, 25	2
6	Characterization	Selection of character	26, 27	2
		The attractiveness of character	28	1
7	Overall	Overall appearance integration	29, 30	2
	Appearance			
Total				

Furthermore, data analysis was carried out by using quantitative descriptive analysis techniques and qualitative descriptive analysis. Qualitative data was obtained at the expert review stage in the form of suggestions and comments. Meanwhile, quantitative data was obtained at the expert review stage in the form of a score on the assessment sheet, after obtaining the percentage through several test stages and then converted to the conversion table of the level of achievement scale 5.

3. Result and Discussion

The results obtained from the analysis at the analysis stage were carried out through several stages, needs analysis, curriculum analysis, student characteristic analysis, and media analysis. The needs analysis stage was carried out on developing the media used in SD Gugus VI, Kecamatan Buleleng using a questionnaire and interview method. Based on the questionnaire results, it was found that as follows: first, 90% of teachers stated that the scope of the material in the social studies book was still limited. Second, 70% of teachers use learning media when teaching social studies. Third, 90% of teachers stated that they never used digital comic media in the learning process. Fourth, 80% of teachers stated that social studies materials need to be developed or packaged into digital comic media. It is found that digital comic media on the topic of socio-cultural diversity of fourth-grade elementary school students was very suitable to be developed. The needs analysis was matched with the media development that has been carried out at SD Gugus VI, Kecamatan Buleleng, 2020/2021 academic year.

The planning stage (design) of learning media started from determining the material developed in digital comic media, making a digital comic media design, showing the supervisor to get input or suggestions for improving the media. Making digital comic media begins with compiling a storyline, then sketching the characters that were made manually. After that, they refined using adobe illustrator then followed by dubbing characters using voice memos, making the background using the adobe illustrator application, and designing a video with a ratio of 16:9 using Adobe Premiere Pro. Then proceed with the editing process of dubbing and adding a sound effect using Adobe Premiere Pro. The digital comic media design stage can be seen in Table 4.

The development stage was carried out by developing digital comic media on the topic of fourth-grade socio-cultural diversity. Digital comic media were designed and developed with characters that were packaged as attractive as possible. The media developed equipped with comics, learning objectives, and material delivery instructions until the end is presented attractively. This digital comic media was also packaged with audio and material presentation 8 minutes 1 second. Then it was consulted with the supervisor for input or suggestions for improving digital comic media. After the media has been repaired or made from the supervisor's results, an expert test was carried out to determine which media has been developed. The expert test consists of 2 media experts by the lecturer, two material experts by the

lecturer, and two practitioners by the teacher. The data obtained from the expert test results are then analyzed so that the validity of the digital comic media made is then corrected if there are suggestions or input. The digital comic media trial results were carried out by six experts, which can be presented in the following figure 1.

Table 4. Digital comic media design

concept design	application used	Illustration
The process of creating a character	Drawn manually, then digitized using adobe illustrator.	
Background creation process	Adobe Illustrator	SD NEGERI 1
The process of combining characters and backgrounds	Adobe Premiere Pro	The state of the s
The process of designing a comic into a video	Adobe Premiere Pro	
Character dubbing process	Voice Memos	
The process of editing, dubbing and adding sound effects	Adobe Premiere Pro	

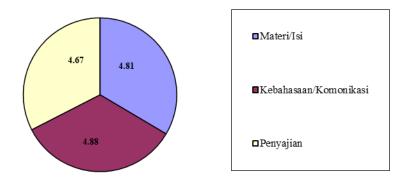


Figure 1. The Average Validation Score of the Material Expert Digital Comic Media

From Figure 1 above, it can be seen that the achievement in the material/content aspect scored 4.81 with a very good category. The linguistic/communication aspect scored 4.88 with a very good category, and in the presentation aspect, it scored 4.67 with a very good category.

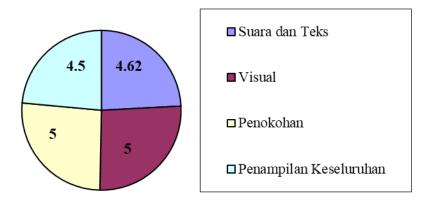


Figure 2. the average validation score of digital comic media experts

From Figure 2. above, it can be seen that the achievement in the aspects of voice and text scored 4, 62 with a very good category. In the visual aspect, it scored 5 with a very good category. In the characterization aspect, it scored 5 with a very good category. In terms of overall appearance, it scored 4.5 with a very good category.

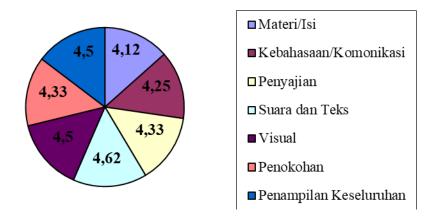


Figure 3. The Average Validation Score of Practitioners' Digital Comic Media

From the results of Figure 3 above, it can be seen that the achievement in the material or content aspect scored 4.12 with a very good category. In language/communication, it scored 4.25 with a very good category. In the presentation aspect, it scored 4,33 with a very good category. The aspect of voice and text scored 4.62 with a very good category. On the visual aspect, it scored 4.5 with a very good category. The

characterization aspect scored 4.33 with a very good category, and on the overall appearance aspect, it scored 4.5 with a very good category. In line with this, the media developed was feasible to be used as a learning media for students. Digital comic media are in very good qualifications supported by the quality of learning media aspects of sound quality, visual quality, and presentation (Ayu et al., 2019; Riwanto & Wulandari, 2018). Nugraheni supported this statement that learning media development includes aspects of language, presentation, and material relevance. In line with the research above, Kanti (2018) stated that media assessment in development includes illustration design and aspects of media attractiveness. In the material/content aspect, it has an average score of 4.81 with very good qualifications. Very good qualifications in the material/content aspect supported by material criteria that easy to understand. The material presented was following student characteristics, the correctness of the material concept, the clarity of identification of comics on the title page, the learning objectives conveyed clearly and easily understood.

Digital comic media on socio-cultural diversity were developed based on the needs analysis conducted in Gugus IV, Kecamatan Buleleng, 2020/2021 academic year. This media was different from the comic media developed previously because no one has developed digital comic media on socio-cultural diversity. In addition, this media was made with interesting character images and produced conversational sounds in digital comics, and made in video form. With the development of digital comic media, it can help students 'learning and increase students' knowledge, especially on socio-cultural diversity. (Purnama et al., 2015; Wahyudin et al., 2020) Stated that digital comics are very helpful for teachers in learning because digital comics are very easy, it does not require knowledge of programming language and the ability to understand character creation from comic characters. From the results of previous research, it is believed that digital comic media on the topic of socio-cultural diversity implemented in elementary schools can improve student learning outcomes and can motivate students to be more active in learning. In addition, the use of media in the learning process can motivate student interest in improving student learning outcomes (Fitri et al., 2014; N. Hidayah & Ulva, 2017; Y. F. Hidayah et al., 2018). It is in line with (Nafis, 2016; Sukmanasa et al., 2017) revealed the results of his research that digital comic media increased motivation, cognitive learning outcomes, and effective learning outcomes.

In addition, the digital comics developed can make students understand the material presented because in the digital comics that are developed, students can see the storyline of the material presented. This digital comic has a language that is easy to remember, understand, and this digital comic was very interesting. Students were not bored in reading the learning materials available in this digital comic. So that learning will be more effective compared to learning just by reading books. It is in line with (Kustianingsari, 2015; Rohmanurmeta et al., 2019), which states that digital comics effectively influence student learning outcomes because digital comic media can present interesting and meaningful material reading textbooks in a learning process.

4. Conclusion

From the above discussion, it can be concluded that digital comic media on the topic of sociocultural diversity of fourth-grade elementary school students is feasible to be developed and used. It can be seen from the results of the validity test of the visual aspects supported by the suitability of the media illustrations in the very good predicate. The overall appearance aspect gets a very good predicate, supported by the appearance of appropriate illustrations, attractive characters, background and word balloons, attractive animation, and transitions between panels. Based on this, digital comic media is suitable for use in the learning process.

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