

## Development of Digital Comic Learning Media in Social Studies Subjects for Grade IV Students of SDN Kalibaru 07

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### Abstract

*This research was carried out based on the results of field analysis to teachers regarding the difficulties in developing learning media so that they felt bored during the learning process. This study aims to develop digital comics learning media in social studies subjects for economic activities. The method used in this research is the development (R&D) method with the ADDIE model which consists of four steps, namely 1) analysis, 2) design, 3) development, 4) implementation and 5) evaluations. This research was conducted at SDN Kalibaru 07. The information obtained in this study was conducted by giving questionnaires to media experts, material experts, education experts, and questionnaires from students.*

### Keywords

Development; learning media; digital comic.



### I. Introduction

At this time, the innovation needed in the field of education is to use more technology, because technology is very useful in the current era of the Covid-19 pandemic. Technology can help students in obtaining subject matter. In addition, technology also plays an important role in increasing the creativity of educators and students, educators can innovate in the delivery of learning materials and utilize technology to create learning media. The outbreak of this virus has an impact of a nation and Globally (Ningrum et al, 2020). The presence of Covid-19 as a pandemic certainly has an economic, social and psychological impact on society (Saleh and Mujahiddin, 2020). Covid 19 pandemic caused all efforts not to be as maximal as expected (Sihombing and Nasib, 2020).

Teachers as educators must provide insight by mastering learning media, teachers must think critically and creatively in the use of appropriate learning media for their students to participate in building the world of education. Responsible for the success of the teaching and learning process, the use of appropriate learning media is a very important factor in the teaching and learning process.

Media is an inseparable part of the teaching and learning process to achieve learning goals. Media is also one of the learning components that can determine the success of learning (Kharisma, 2020). Where in the learning process teachers are required to reduce the use of lecture methods and replace them with the use of learning media. The use of media can help convey learning materials to be more meaningful and clearer so that learning objectives can be achieved efficiently and effectively (Dwijayani, 2019).

In fact, in the learning process, many teachers have not used digital media during learning because teachers are still not skilled in using these media. Finally, in the learning process in the classroom, the teacher is more dominant in explaining the material without learning media (Abdullah, 2017). Other problems such as teachers still having difficulty in choosing learning media that suits their learning conditions (Anugraheni, 2017) and teachers' technological competencies still lacking to develop computer-based media

independently (Sinsuw & Sambul, 2017), the use of media in social studies learning is still not optimal. Likewise, the availability of social studies learning media in schools has not been developed much only using visual media that are less interactive such as images and globes.

This was reinforced by the results of an interview with one of the class IV teachers at SDN Kalibaru 07 who stated that the learning media available in schools was limited, the teacher stated that there were no learning media in the form of digital comics in schools, the teacher stated that social studies material was very necessary and the teacher stated that social studies material needed to be developed or packaged into digital comic media.

The use of less-than-optimal media in learning also results in teachers having difficulty in explaining the material, especially abstract ones, which results in students having to think abstractly so that students have minimal knowledge of the concepts taught and it is difficult to remember learning materials in the long term which affects their learning outcomes. From this situation, it is necessary to transform the learning process towards a better direction so that the learning atmosphere becomes more pleasant. Learning can be said to be fun if in the learning process students are active, enthusiastic, and able to understand what is explained well. This can be overcome by developing reading media to be even more interesting both in terms of the language of delivery and appearance. Therefore, the development of digital comic media is needed.

Digital comics are a form of a story with certain characters presented in the form of images and their presentation using certain electronic devices. This digital comic is interesting because the stories and dialogues between the characters will be packaged in the form of comics that are operated using a projector or cellphone so that readers will feel comfortable and easy to use because they can be operated anywhere and anytime, not only in class but also at home (Syahmi et al., 2022). The advantage of developing this digital comic is that learning becomes more interesting because students can learn through visual elements (images). Where media with visual elements can convey learning material to be clearer and easier to digest because students do not think abstractly (Hilmi, 2016). Able to describe events in a short time, the information conveyed quickly and easily, develops students' thoughts and participation, able to develop students' imagination. The delivery of the material has a sequential storyline so that it is easy for students to understand and remember (Raneza & Widowati, 2020). With the implementation of this media development, the learning process becomes more meaningful (Nugraha, 2020)

The purpose of this study is to develop digital comic media on the material on economic activities in grade IV elementary schools that are tested for validity. The existence of digital comic media can help teachers explain a material that is difficult for students to translate, and encourage student's enthusiasm and interest in learning so that the learning process becomes more meaningful that it can affect student learning outcomes and the achievement of learning objectives.

## II. Research Method

In this study, researchers used a type of *research & development*. Research and development (R&D) are a research method that produces or tests the effectiveness of a particular design, program, or product through the stages of design, trial, and revision to achieve certain qualities and standards (Kamal, 2020). In research and development, there are several models for a development flow, while the model used by researchers is guided by the ADDIE model which consists of 5 stages of development. The ADDIE model has more because at each stage it always goes through the evaluation stage first so that it can minimize any errors (Dwiqui et al., 2020).

Meanwhile, the approach used in this study uses 2 types of approaches, namely quantitative and qualitative. The quantitative approach is obtained through the results of questionnaires and validations that have been given to material experts, media experts, and student trials as research objects. Meanwhile, in the qualitative approach of the data produced through interviews and assessment of criticisms as well as suggestions from media experts and material experts on the quality of the media developed.

The subject of this study was in the form of a digitalized comic media product with material on the economic activities of grade IV elementary school students and experts who are competent in their fields. The expert consists of one teacher as a material expert who competes in social studies content, one lecturer as a media expert to provide media reviews that have been developed, and a small group of 5 students and a large group of 10 students. With the object of research, namely digital comic media, the material of economic activity. The grid of digital comic assessment sheets is presented in the following table.

**Table 1.** Material Expert Media Validation Instrument Grids

Aspects	Indicator
Material	<ul style="list-style-type: none"> <li>- Conformity of the material</li> <li>- Clarity of material delivery</li> <li>- Ease of the material to understand</li> </ul>
Language	Using language that is easy for students to greet
Learning	<ul style="list-style-type: none"> <li>- Assist in the learning process</li> <li>- Improving the ability of participants to be educated</li> </ul>

**Table 2.** Media Expert Media Validation Instrument Grid

Aspects	Indicator
Display	<ul style="list-style-type: none"> <li>- Text is presented</li> <li>- Illustrator is presented</li> <li>- Fusion in the use of color</li> <li>- Layout design</li> <li>- Accuracy in font selection and size</li> <li>- Attractive background view</li> </ul>
Characterization	<ul style="list-style-type: none"> <li>- Character selection of characters</li> <li>- Character interest</li> </ul>
Programming	<ul style="list-style-type: none"> <li>- Flexibility in use</li> <li>- Overall media operation is easy to operate</li> </ul>

**Table 3.** Grid of response instruments by educators

Aspects	Indicator
Learning	<ul style="list-style-type: none"> <li>- Conformity of the material too basic competencies</li> <li>- Flexibility in the presentation of the material</li> <li>- Facilitate educators in the learning process and can motivate teachers to improve</li> </ul>
Language	- Use language that is easy for learners to understand
Media	<ul style="list-style-type: none"> <li>- Ease of Use</li> <li>- Suitability of selection of type, size, and color of huruf</li> <li>- Character selection of characters</li> <li>- Character interest</li> </ul>

**Table 4.** Grid of response instruments by students

Aspects	Indicator
Learning	<ul style="list-style-type: none"><li>- Activeness during learning</li><li>- Assist in the learning process</li></ul>
Material	<ul style="list-style-type: none"><li>- Conformity of the material</li><li>- Clarity of material delivery</li><li>- Ease of the material to understand</li></ul>
Media	<ul style="list-style-type: none"><li>- Presentation of digital comic learning media</li></ul>

The score guidelines with the assessment scale validate material experts and media experts are using a check form Likert scale with a scale of 5 which is presented in the following table:

**Table 5.** Description of Research Instrument scores

Shoes	Category
5	Excellent
4	Good
3	Enough
2	Not Good Enough
1	Very Bad

According to Purwanto (Widiastika et al., 2020), the following formula is used for data analysis of media expert validation results, educator validation, and student trials:

$$NP = \frac{R}{SM} \times 100\%$$

**Information:**

NP: The average value of the indicator being searched for

R: The score obtained by each indicator

SM: Maximum score

The above formula can determine the level of success of learning media development based on the level of feasibility and product revision. The following eligibility criteria are contained in the table

**Table 6.** Eligibility criteria

Achievement Rate (%)	Category	Information
100% - 80%	Very Worthy	Valid (no revision required)
79% - 62%	Proper	Fairly Valid (no revision required)
61% - 40%	Decent Enough	Less Valid (Revised)
39% - 0%	Less Viable	Invalid (Revision)

(Widiastika et al., 2020)

### III. Result and Discussion

#### 3.1 Population Policy During Turki Utsmani 1512-1566 M

This research was conducted to develop and validate the learning media used in the learning process. The learning media developed is declared feasible to be used based on validation by learning media experts, validation of material experts, and trial results by teachers and student responses.

Validation of media experts is carried out to find out the shortcomings of digital comic media which concern the aspect of learning media assessment. The assessment and input given by media experts, namely, spelling and writing are still not correct. The results of the calculation of the validation of the feasibility of media experts for the product developed got a score of 69/75 as a result if the percentage was 92% and was included in the "Very Feasible" category.

**Table 7.** Media Expert Value Data

Validator Name	Scores obtained	Maximum score	Average percentage
Siti Muthi'ah Rachman, M.Pd	69	75	92%

At the validation stage, the material expert aims to determine the feasibility and suitability of the material on the developed media. Assessment from material experts, namely the material used is following the running curriculum and the abilities of students. The final result of the material assessment from the validated digital comic available obtained a score of 75/75 so that if it is presented, it becomes 100% and is included in the "Very Feasible" category.

**Table 8.** Expert M Value Data

Validator Name	Scores obtained	Maximum score	Average percentage
Darti Isyanti, M. Pd	75	75	100%

Validation by education experts is carried out to see the feasibility of using digital comic media used in the classroom. Researchers chose Mrs. Sariyati, S. Pd., as a validator of education experts at SDN Kalibaru 07. After seeing and using digital comic media, validators assessed that this media was considered quite creative and able to attract students' interest and attention in social studies learning. In addition, he also assessed that this product was able to increase students' enthusiasm for learning. The final result of the Digital Comics media validated by education experts obtained a score of 73/75 so that when presented it became 97% and fell into the "Very Feasible" category.

**Table 9.** Education Expert Value Data

Validator Name	Scores obtained	Maximum score	Average percentage
Widayati, S. Pd	73	75	97%

After the product has been validated by three validators and categorized as Very Feasible, a small group and large group trial are then carried out. A small group trial involved 5 grade IV students. Instruments were used in small group trials by providing questionnaires to determine the feasibility of Digital Comics media before being tested in larger groups. The small group trial was held on July 1, 9, 2022. The results of the small group trial can be seen in Table 10

**Table 10. Small Group Trials**

Student respondents	Shoes (Max 75)	Percentage	Kelayakan
1	70	93%	Very Worthy
2	66	88%	Very Worthy
3	68	91%	Very Worthy
4	69	92%	Very Worthy
5	68	91%	Very Worthy
Average	341/375	91%	Very Worthy

After conducting small group trials by providing questionnaires, students got an average score of 341/375 reaching 91% and entering the very decent category, and in this small group, the trial did not get revisions from students so that they could proceed to the large group trial stage. The large group trial involved 10 grade IV students. Large group trials will be held on July 20, 2022

**Table 11. Large Group Trials**

Student respondents	Shoes (Max 75)	Percentage	Kelayakan
1	69	92%	Very Worthy
2	67	89%	Very Worthy
3	70	93%	Very Worthy
4	69	92%	Very Worthy
5	75	100%	Very Worthy
6	75	100%	Very Worthy
7	75	100%	Very Worthy
8	75	100%	Very Worthy
9	75	100%	Very Worthy
10	75	100%	Very Worthy
Average	725/750	96%	Very Worthy

The trial in the large group was carried out by providing questionnaires to students and testing media to students with a purpose, and the average score results obtained from large trials were 725/750 so if they were concentrated, they got 96% results and fell into the very decent category. The results of validation by three validators and conducted small group and large group trials showed that digital comic media is very feasible to be used in learning activities



## Kompetensi Inti

**Kompetensi Inti**

- KI 1 Menerima dan menjalankan ajaran agama yang dianutnya.
- KI 2 Memiliki perilaku jujur, disiplin, tanggung jawab, santun, peduli, dan percaya diri dalam berinteraksi dengan keluarga, teman, dan guru.
- KI 3 Memahami pengetahuan faktual dengan cara mengamati (mendengar, melihat, membaca) dan menanya berdasarkan rasa ingin tahunya tentang dirinya, makhluk ciptaan Tuhan dan kegiatannya, dan benda-benda yang dijumpainya di rumah, sekolah, dan tempat bermain.
- KI 4 Menyajikan pengetahuan faktual dalam bahasa yang jelas, logis, dan sistematis dalam karya yang estetis, dalam gerakan yang mencerminkan anak sehat, dan dalam tindakan yang mencerminkan perilaku anak beriman dan berakhlak mulia.

## Kompetensi Dasar dan Indikator

Kompetensi Dasar	Indikator
3.3 Mengidentifikasi kegiatan ekonomi dan hubungannya dengan berbagai bidang pekerjaan serta kehidupan sosial dan budaya di lingkungan sekitar sampai provinsi.	3.3.1 Mengonalisa kegiatan ekonomi dan hubungannya dengan berbagai bidang pekerjaan meliputi produksi, distribusi, dan konsumsi di lingkungan sekitar.

## Pengenalan Tokoh



**Bima**



**Lia**



**Tami**



**Ami**

Oh, benar ya? Di Bandung banyak banget yang jual makanan dan minuman loh, gimana?

Ya, memang sih. Bandung tuh jadi kota yang banyak banget kuliner dan minuman yang enak-enak.

Ya, memang sih. Bandung tuh jadi kota yang banyak banget kuliner dan minuman yang enak-enak.

Bisa pendapat kamu sih, mana yang lebih menarik? Bandung atau Jakarta?

Bandung itu udah udah lah, memang sih. Bandung tuh jadi kota yang banyak banget kuliner dan minuman yang enak-enak. Bandung tuh jadi kota yang banyak banget kuliner dan minuman yang enak-enak.

Lia, apakah ada alasan loe pilih Bandung?

Tentu aja ada, Bandung tuh jadi kota yang banyak banget kuliner dan minuman yang enak-enak. Bandung tuh jadi kota yang banyak banget kuliner dan minuman yang enak-enak.

Oh, iya, memang sih. Bandung tuh jadi kota yang banyak banget kuliner dan minuman yang enak-enak. Bandung tuh jadi kota yang banyak banget kuliner dan minuman yang enak-enak.

Oh, iya, memang sih. Bandung tuh jadi kota yang banyak banget kuliner dan minuman yang enak-enak. Bandung tuh jadi kota yang banyak banget kuliner dan minuman yang enak-enak.



Figure 1 Digital Comic Media developed

#### IV. Conclusion

Based on the results of the research that has been explained, the development of Digital Comics media in social studies subjects, and economic activity material has been tested on class IV students and validated by experts, namely media experts, material experts, and educational experts. The final result of this study is that Digital Comic media can be used as a learning medium in supporting the learning activities of students in schools. It can be concluded that this research produced a Digital Comics media with a very decent category and can be used well in schools.



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## References

- Abdullah, R. (2017). Pembelajaran Dalam Perspektif Kreativitas Guru Dalam Pemanfaatan Media Pembelajaran. *Lantanida Journal*, 4(1), 35. <https://doi.org/10.22373/lj.v4i1.1866>
- Anugraheni, I. (2017). Analisa Faktor-Faktor yang Mempengaruhi Proses Belajar Guru-Guru Sekolah Dasar. *Kelola: Jurnal Manajemen Pendidikan*, 4(2), 205. <https://doi.org/10.24246/j.jk.2017.v4.i2.p205-212>
- Dwijayani, N. M. (2019). Development of circle learning media to improve student learning outcomes. *Journal of Physics: Conference Series*, 1321(2). <https://doi.org/10.1088/1742-6596/1321/2/022099>
- Dwiyi, G. C. S., Sudatha, I. G. W., & Sukmana, A. I. W. I. Y. (2020). Pengembangan Multimedia Pembelajaran Interaktif Mata Pelajaran IPA Untuk Siswa SD Kelas V. *Jurnal Edutech Undiksha*, 8(2), 33. <https://doi.org/10.23887/jeu.v8i2.28934>
- Hilmi. (2016). EFEKTIVITAS PENGGUNAAN MEDIA GAMBAR DALAM PEMBELAJARAN BAHASA ARAB. *Lantanida Journal*, 4(2), 128.
- Kamal, M. (2020). Research and Development ( R & D ) Tadribat / Drill Madrasah Aliyah Class X Teaching Materials Arabic Language. *Junal Sejarah, Pendidikan Dan Humaniora*, 4(1), 10–18. <https://doi.org/10.36526/js.v3i2.e-ISSN>
- Kharisma, G. I. (2020). Pengaruh Media Pembelajaran Berbasis Android terhadap Kemampuan Memahami Teks Prosedur Siswa Kelas VII. *BELAJAR BAHASA: Jurnal Ilmiah Program Studi Pendidikan Bahasa Dan Sastra Indonesia*, 5(2), 269–278. <https://doi.org/10.32528/bb.v5i2.2795>
- Ningrum, P. A., et al. (2020). The Potential of Poverty in the City of Palangka Raya: Study SMIs Affected Pandemic Covid 19. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal) Volume 3, No 3, Page: 1626-1634*
- Nugraha, D. A. (2020). Pengembangan Komik Kimia Sebagai Media Pembelajaran Berbasis Cet (Chemo-Edutainment). *Chemistry in Education*, 9(2), 84–90.
- Raneza, F., & Widowati, H. (2020). Analisis Urgensi Pengembangan Komik Digital Dengan Mengintegrasikan Nilai-Nilai Keislaman. *Biolova*, 1(1), 13–18. <https://doi.org/10.24127/biolova.v1i1.28>
- Saleh, A., Mujahiddin. (2020). Challenges and Opportunities for Community Empowerment Practices in Indonesia during the Covid-19 Pandemic through Strengthening the Role of Higher Education. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal). Volume 3, No 2, Page: 1105-1113.*
- Sihombing, E. H., Nasib. (2020). The Decision of Choosing Course in the Era of Covid 19 through the Telemarketing Program, Personal Selling and College Image. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal) Volume 3, No. 4, Page: 2843-2850.*
- Sinsuw, A. A. E., & Sambul, A. M. (2017). Pelatihan pengembangan media pembelajaran berbasis teknologi informasi bagi guru-guru SMP. *Jurnal Teknik Elektro Dan*

Komputer, 6(3), 105–110.

Syahmi, A. F., Ulfa, S., & Susilaningsih. (2022). Pengembangan Media Pembelajaran Komik Digital Berbasis Smarthpone Untuk Siswa Sekolah Dasar. *Kajian Teknologi Pendidikan*, 5(1), 81–90. <https://doi.org/10.17977/um038v5i12022p081>

Widiastika, M. A., Hendraipta, N., & Syachruroji, A. (2020). Pengembangan Media Pembelajaran Mobile Learning Berbasis Android Pada Konsep Sistem Peredaran Darah di Sekolah dasar. *Jurnal Basicedu*, 5(1), 47–64. <https://doi.org/10.31004/basicedu.v5i1.602>