Application of Digital Comic Media to Improve Student Understanding of Pancasila and Citizenship Education Subjects

Ade Suherman¹, Mochamad Ghina Robbani², Jamilah³, Tetep⁴

<u>adesuherman@institutpendidikan.ac.id</u>¹, <u>ghinarobbani7@gmail.com</u>², <u>jamilah@institutpendidikan.ac.id</u>³, <u>tetep@institutpendidikan.ac.id</u>⁴

Institut Pendidikan Indonesia^{1,2,3,4}

Abstract. This study aims to determine the application of digital comic media in increasing students' understanding of Pancasila and Citizenship Education subjects. This study uses a quantitative approach to quasi-experimental design, in the form of a nonequivalent control group design. The sampling technique was purposive sampling in class XI MIPA at SMAN 16 Garut Regency. Data collection techniques through tests in the form of multiple choices. Data analysis techniques through the N-Gain test. The research results show that; The main function of learning media is digital comic media as a teaching aid that is arranged and created by the teacher to influence the climate, conditions and learning environment, making comic media with attention, the storyline presented is interesting, using an attractive appearance and the language used is good, Presentation of simple material, Results of the N-Gain Test treatment (treatment) using digital comic learning media in learning Pancasila and Citizenship Education, student learning outcomes have higher effectiveness than conventional learning. The teacher's obstacles in implementing digital comic media, namely, first; a good editing process, second; comic media that is made must be in accordance with the theme or material that will be conveyed to students, third; It takes quite a long preparation and application time.

Keywords: Digital Comic Media, Student Understanding, Pancasila Education and Citizenship

1. Introduction

The quality of human resources is one of the factors of a country's progress, in improving the quality of human resources one of the important pillars is education. Good education will give birth to abundant and quality human resources. The future sustainability of the Indonesian nation is determined by the sense of patriotism of its citizens formed by education. In the implementation of education, especially Pancasila and civic education, it is necessary to emphasize how students can understand and practice every material provided in order to improve the quality of human resources. Understanding can be interpreted as mastering something with the mind, so that students can understand a situation, understand the meaning and capture the meaning is the ultimate goal of learning (Sardiman, 2020). To form quality human resources, education must be easily understood by students. In the education process, it cannot be separated from learning activities. to improve students' understanding and learning outcomes, it is necessary to develop learning methods and media that pay attention to the times by paying attention to the essence or learning objectives to support learning activities. The success of learning that improves students' understanding and learning outcomes is influenced by various factors, namely teachers, social environment, student interaction, curriculum and learning media. Learning success is the main goal of all learning activities carried out by teachers and students, so teachers must be able to minimize and optimize various factors that hinder the learning process (Junaidi, 2019). Ideal learning process activities are created if the teacher is able to achieve learning objectives by utilizing every available resource both inside and outside the classroom that supports the achievement of learning objectives.

Based on observations made by previous researchers, researchers found that students' understanding of Civics learning was still low. This is evidenced by the fact that there are still many students who do not meet the KKM in the Civics daily test. Where the predetermined KKM is at least 75. With the number of students in one class of 36 students. After the calculation, it was concluded that the average student score was 73 which was the score obtained by one class. This proves that the level of student understanding is still low because the average value of one class is not able to exceed the predetermined KKM. A total of 36 students did not pass. With a score below the predetermined KKM.

One of the factors determining the success of Civics learning is the application of appropriate learning media. The use of appropriate learning media can help students understand the concepts learned in learning activities (Aghni, 2018). Therefore, researchers propose solutions from the use of appropriate learning media which are expected to be a solution for teachers to increase learning enthusiasm, learning motivation, learning outcomes and student understanding of a concept being studied. Which includes psychological elements, namely: motivation, concentration and reaction. Learners as learning subjects can freely develop facts, ideas, and skills (Yonanda, 2017).

Learning media is used to convey information in the learning process in the classroom, and can arouse students' attention and interest in learning (Arsyad, 2011). Therefore, it requires careful and systematic planning, in-depth and thorough evaluation and structured supervision. In the learning process, media is defined as a tool or support in the form of media in visual or verbal form that facilitates the achievement of learning objectives.

Comics can be used to convey information in a common and easy-to-understand way. Comic media combines the power of pictures and words to structure stories and make information easier to understand. Include actions to facilitate the assimilation of information. The text makes it more understandable and easy to grasp, the storyline makes it easy to remember and understand (Nasution, 2019). As well as easier to understand over a long period of time (Wulan et al., 2020). This is in line with what was conveyed by Nurhayati et al. (2019) who explained that digital comic media effectively increases student motivation and creativity in learning Civics in class XI IPA SMA Negeri 8 Kota Serang. Motivating students to learn and think creatively to be creative and achieve learning goals Civics learning goals are achieved well cognitively, emotionally, psychomotorly. Allows the learning process to run well the Student Centre-based learning process runs optimally. Development of digital comic learning media in learning activities to master knowledge and understanding. Digital comic learning media is a medium that attracts student interest, presents more interesting material and helps improve student understanding of an abstract learning concept. As well as digital comic media in its use is an attractive, efficient and effective media (Kanti et al., 2018).

The advantages of digital comic media include: (1) In terms of attractiveness, comics can attract students' interest in learning and instruct stuntmen to prepare stories into pictures so that they can remember things longer. (2) Comics that contain stories can clarify the story as a whole, because illustrative images can make students less demanding for students to get certain frames or cases from students in understanding certain forms or illustrations of story reasons. (3) Can develop students' interest in reading carefully to understand the concept of learning material.

Disadvantages of Advanced Comic Media include: (1) Not everyone learns well with a visual style. (2) In some cases, the dialect or vocabulary in comics is poor. (3) Many comics contain stories that emphasise savagery or inappropriate behaviour (Riwanto & Wulandari, 2019).

The use of digital media can help students be creative, varied and innovative. And can make students happy to learn Civics, because digital comics are environmentally friendly, cost-effective and flexible. Digital comics are environmentally friendly, economical and flexible. It is said to be environmentally friendly because digital comics do not use paper as a medium of delivery, thus saving the use of paper. With this combination, it is hoped that it can create a serious learning atmosphere but still has interesting visual elements, attracts students' interest, does not make students feel bored and sleepy when studying in class, so that students do not feel bored and sleepy during the learning process.

2. Methods

This research was conducted at SMAN 16 Garut. This research used Quasi Experiment which is a design that has an experimental group and a control group. The quasi experimental design used was Nonequivalent Control Group Design where this design applied pretest and posttest for experimental class and control class. The population of this study were 70 students and teachers of SMAN 16 Garut. The research instrument used in the form of multiple choice questions totalling 14 questions to measure the level of student understanding. Before being used, the research instrument was first tested for validity, reliability, distinguishing power and difficulty level. Data analysis techniques used normality test, homogeneity test and N gain test.

3. Results and Discussion

3.1. Application of Digital Comic Media in Improving Student Understanding

Before applying comic media, researchers prepare the media to be applied with the following steps:

1. Determining Story Goals and Story Ideas

The purpose of learning comic media to be aware of threats to the Unitary State of the Republic of Indonesia is to help improve students' understanding of the material presented. This comic has the essence to accompany the learning that will be applied.

2. Creating a Storyline Scheme

This learning comic media to be aware of threats to the Unitary State of the Republic of Indonesia has a flow by opening comic media with titles and outlines of material that will help students to understand the material to be explained at the meeting or in the material. The next step is the story in the comic will bring up characters that are quite famous and popular among students. Like the characters found in the SPY x Family comics/manga, Naruto and others. With the aim of increasing enthusiasm, curiosity and curiosity.

3. Target Audience

The main target of this learning comic to be aware of threats to the Unitary State of the Republic of Indonesia is students, especially class XI. Not only for students, the general public and academics who want to increase knowledge and insight and become a reference for academics in the field of Civics.

4. Synopsis

In maintaining the unity and integrity of the Unitary State of the Republic of Indonesia, qualified abilities are needed from the nation's next generation. Because the younger generation will continue the relay of leadership and the spirit of state defence, it is necessary to understand what are the threats to the Republic of Indonesia. Through learning comics to be aware of the threats to NKRI.

5. Making Clean Illustrations

Clean illustration is a more detailed depiction of comic pages according to the character you want to draw.

6. Finishing

The finishing process is the process of giving word balloons or tones to official illustrations. The finishing process of the comic learning comic Alert Threats Against NKRI is as follows:

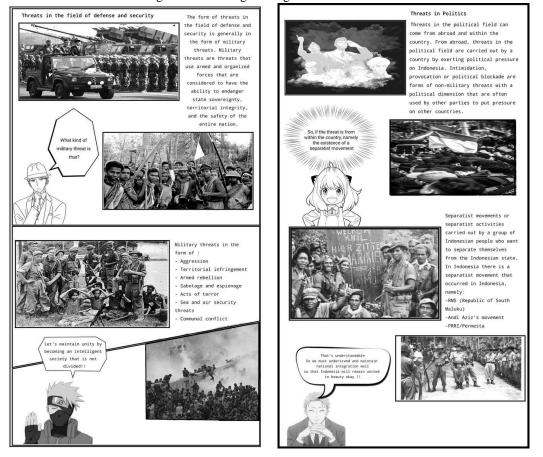
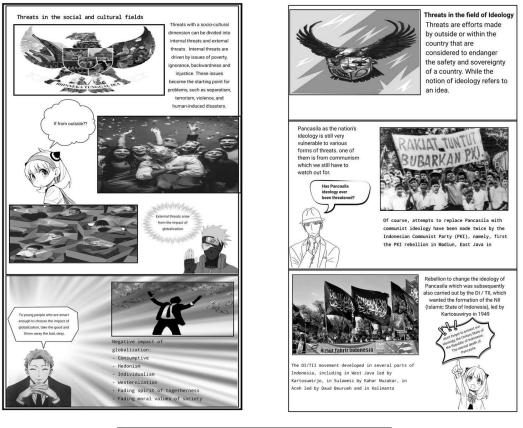
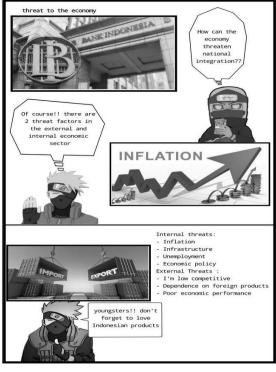


Figure 1. Finishing the Digital Comic Media





According to Indrivani (2019) explains that "the main function of learning media is as a teaching aid that is arranged and created by the teacher to influence the climate, conditions, and learning environment". Therefore, researchers compiled comic media with the aim of maximising learning activities so that students could understand the learning material. Comic media is made by paying attention to the criteria for selecting ideal learning media according to Sudjana Nana & Rivai Ahmad (2016), namely: (1) Media accuracy with learning objectives. (2) Media support for the content of the subject matter. (3) Ease of obtaining media. (4) Available time to apply it. (5) In accordance with the level of knowledge of students. Therefore, researchers make comic media by paying attention, the storyline presented is interesting, uses an attractive appearance and the language used is good, the presentation of simple material. . With learning material to be aware of threats to the Republic of Indonesia. Comic learning media is applied using the jigsaw type cooperative learning method. Students are given comic media with different problems or discussions with the aim of creating an active situation. The situation in the classroom is in accordance with expectations, namely active and enthusiastic learners who follow learning well. Learners alternately present the results of group work and question and answer between members of different groups. with the results of the research that occurred, students can be said to have increased understanding where the ability of students' understanding can be measured based on several operational verbs (Yonanda, 2017) as follows: (1) Comparing; (2) Identifying; (3) Detailing; (4) Counting; (5) Changing; (6) Describing; (7) Distinguishing; (8) Discussing; (9) Giving examples: (10) Expressing, etc. The researcher found that students have met the standards of measuring student understanding in the learning process.

3.2 Students' understanding before and after the application of comic media in the experimental class with the control class at SMAN 16 Garut

At the time of implementing learning by applying comic learning media, researchers gave a pretest before carrying out treatment and posttest after treatment. Researchers compared student learning outcomes before and after the application of comic media learning media and comparison of learning outcomes between experimental and control classes. With the following results:

Nilai pretest dan posttest								
No.	Respondents	Experiment		Control				
		pretest	posttest	pretest	posttest			
1	S 1	66	85	62	76			
2	S 2	67	84	58	75			
3	S 3	64	79	56	77			
4	S 4	59	77	66	73			
5	S 5	74	90	67	76			
6	S 6	78	86	71	78			
7	S 7	76	82	49	66			
8	S 8	70	91	69	76			
9	S 9	73	79	63	76			
10	S 10	49	78	68	75			
11	S 11	48	82	63	78			
12	S 12	64	88	57	60			
13	S 13	59	83	65	82			

Table 1

14	S 14	57	77	68	79
15	S 15	69	82	77	83
16	S 16	77	91	61	74
17	S 17	64	86	54	72
18	S 18	60	81	67	73
19	S 19	71	100	54	78
20	S 20	56	81	58	68
21	S 21	58	78	68	73
22	S 22	63	76	63	70
23	S 23	67	79	48	60
24	S 24	66	94	73	75
25	S 25	69	81	68	70
26	S 26	78	94	75	83
27	S 27	58	75	65	69
28	S 28	49	75	67	73
29	S 29	68	82	58	68
30	S 30	64	100	69	78
31	S 31	60	77	59	75
32	S 32	59	83	57	68
33	S 33	68	88	64	70
34	S 34			68	78
35	S 35			71	81
36	S 36	2128		68	79
	Total		2764	2294	2665
	Average		83,7576	63,72	74,028

Based on the table above, it can be concluded that there is an insignificant difference in the pretest results both in the experimental class 64.48 and the control class 63.72. As for the post-test results, there is a significant difference between the control class with an average result of 74.028 and the experimental class of 83.7576. Therefore, the control class is still below the expected KKM of 75 while the experimental class has exceeded the KKM. Table 2

Comparison of Students Understanding								
Class		Std.						
Class	Pretest	postest	N-gain	Deviasi				
Control	63,7	74	0,28	5,552				
Experiment	64,5	83,8	0,54	6,732				

From table 2, it can be seen that the comparison of the average pretest scores of students' understanding improvement between the control class and the experimental class is 63.7: 64,5. Based on the pretest results that have no significant difference, it can be said that the initial ability of students is the same. The comparison of post-test scores between the control class and the experimental class is 74: 83.8 seen from the post-test value, it can be concluded that the post-test value of the experimental class using digital comic learning media is higher than the control class using conventional learning media. While the normalised Gain comparison between the control class using digital comic learning the post-test value of the experimental class using digital comic learning the post-test value of the experimental class and the experimental class is 0.28: 0.54 based on the post-test value of the experimental class using digital comic learning media is higher than the control class.

Based on the value of student learning outcomes where the experimental class using digital comic learning media has a higher value, it can be said that students can fulfil or perform understanding indicators as stated by Yonanda (2017) that this understanding ability can be measured based on several operational verbs, namely: (1) Comparing; (2) Identifying; (3) Detailing; (4) Calculating; (5) Changing; (6) Describing; (7) Distinguishing; (8) Discussing: (9) Giving examples: (10) Expressing, etc.

3.3. Obstacles to the application of comic learning media in Civics subjects

Based on the results of the research, the constraints of teachers in applying digital comic media are, first; a good editorial process so that the comic media made can be interesting and good for use as learning media, second; comic media made must be in accordance with the theme or material to be conveyed to students so that it is not easy to adjust between images, characters, character conversations, and learning material objectives, third; requires a long preparation and application time so that it is not as practical as other learning media or those that are quite often found and used by teachers. As stated by the interviewee, a teacher at SMAN 16 Garut argued:

"According to mum as a senior teacher, the inhibiting factor is that mum does not master the application or does not know how to make her own comic media. So the difficulty in making comic media is the inhibiting factor, unlike young people like you who are more creative and innovative in mastering technology to make learning media, one of which is comic media" (WT,56).

Even with some shortcomings and obstacles in the application of digital comic media, this can be overcome with good planning and implementation. So that the application of digital comic media as learning media can improve students in Civics subjects. This is supported by Nurrita (2018) that visual media can make it easier for students to understand learning concepts and recall material delivered by the teacher.

4. Conclusions

Based on the findings obtained through research, research findings, data analysis results, and discussion. Specific conclusions that can be drawn by the researcher are as follows:

- 1. The application of comic media increases students' understanding of Civics subjects at SMAN 16 Garut.
- 2. The results of the N-Gain Test (treatment) by using digital comic learning media in learning Pancasila and Citizenship Education, student learning outcomes have higher effectiveness compared to conventional learning.
- 3. The constraints of teachers in applying digital comic media are, first; a good editor process so that comic media made can be interesting and well used as learning media, second; comic media made must be in accordance with the theme or material to be conveyed to students so that it is not easy to adjust between images, characters, character conversations, and learning material objectives, third; requires a long enough preparation and application time so that it is not as practical as other learning media or those that are quite often encountered and used by teachers.

Based on the results of the research, the results of data analysis and discussion, the authors have the following recommendations:

1. For schools

- a. Schools need to provide facilities and infrastructure so that the learning process can take place optimally.
- b. Schools need to organise more training for school teachers so that they can master different learning materials and make learning materials more effective.

2. For teachers

- a. Teachers need to be more creative and innovative in preparing learning materials, this needs to be considered carefully because learning materials play an important role in achieving learning objectives more optimally.
- b. Teachers must prioritise their role as facilitators and mediators. Although comic book teaching materials can be used as learning resources that students can learn by themselves, teacher assistance is still needed so that learning is more optimal.

3. For students

- a. Students must have the willingness and motivation to learn, whether or not there is a teacher accompanying them.
- b. Students must take advantage of the opportunities available by learning seriously.

Reference

- Aghni, R. I. (2018). Fungsi dan jenis media pembelajaran dalam pembelajaran Akuntansi. Jurnal Pendidikan Akuntansi Indonesia, 16(1), 98–107.
- [2] Arsyad, A. (2011). Media Pembelajaran. Jakarta. PT RajaGrafindo Persada.
- [3] Indriyani, L. (2019). PEMANFAATAN MEDIA PEMBELAJARAN DALAM PROSES BELAJAR UNTUK MENINGKATKAN KEMAMPUAN BERPIKIR KOGNITIF SISWA.
- [4] Prosiding Seminar Nasional Pendidikan FKIP, 2(1), 17–26. https://jurnal.untirta.ac.id/index.php/psnp/article/view/5682
- [5] Junaidi, J. (2019). Peran Media Pembelajaran Dalam Proses Belajar Mengajar. Diklat Review: Jurnal manajemen pendidikan dan pelatihan, 3(1), 45–56.
- [6] Kanti, F. Y., Suyadi, B., & amp; Hartanto, W. (2018). PENGEMBANGAN MEDIA PEMBELAJARAN
- [7] KOMIK DIGITAL PADA KOMPETENSI DASAR SISTEM PEMBAYARAN DAN ALAT PEMBAYARAN UNTUK SISWA KELAS X IPS DI MAN 1 JEMBER. JURNAL PENDIDIKAN EKONOMI: Jurnal Ilmiah Ilmu Pendidikan, Ilmu Ekonomi dan Ilmu Sosial, 12(1), 135–141. https://doi.org/10.19184/JPE.V12I1.7642
- [8] Nasution, A. E. (2019). E-KOMPEN (ELEKTRONIK-KOMIK PENDEK) sebagai solusi cerdas dalam meningkatkan minat baca masyarakat Indonesia di era digital. IQRA': Jurnal Perpustakaan dan Informasi, 13(1), 105–113. https://doi.org/10.30829/IQRA.V13I1.4365
- [9] Nurhayati, I., Hidayat, S., & Camp; Asmawati, L. (2019). PENGEMBANGAN MEDIA MEDIA KOMIK DIGITAL PADA PEMBELAJARAN PPKn DI SMA. JTPPm (Jurnal Teknologi Pendidikan dan Pembelajaran): Edutech and Intructional Research Journal, 6(1). https://jurnal.untirta.ac.id/index.php/JTPPm/article/view/7413
- [10] Nurrita, T. (Teni). (2018). Pengembangan Media Pembelajaran untuk Meningkatkan Hasil Belajar Siswa. Misykat, 3(1), 271164. https://doi.org/10.33511/MISYKAT.V3I1.52
- [11] Riwanto, M. A., & amp; Wulandari, M. P. (2019). Efektivitas Penggunaan Media Komik Digital (Cartoon Story Maker) dalam pembelajaran Tema Selalu Berhemat Energ. JURNAL PANCAR (Pendidik Anak Cerdas dan Pintar), 2(1). https://ejournal.unugha.ac.id/index.php/pancar/article/view/195
- [12] Sardiman, A. M. (2020). Interaksi & amp; motivasi belajar mengajar. PT RajaGrafindo Persada.
- [13] Sudjana Nana, & amp; Rivai Ahmad. (2015). MEDIA PENGAJARAN: Penggunaan dan Pembuatannya. Sinar Baru Algensindo Offset. https://pustaka.unm.ac.id/opac/detail-opac?id=41330
- [14] Wulan, I., Wulan, I. S., Suprapto, P. K., & amp; Kamil, P. M. (2020). Belajar Virus dengan Komik: Pengaruhnya terhadap Motivasi dan Hasil Belajar (Studi Eksperimen di Kelas X MAN Tasikmalaya

Tahun Ajaran 2019/2020). Bioedusiana: Jurnal Pendidikan Biologi, 5(2), 70–83. https://doi.org/10.37058/bioed.v5i2.2005

[15] Yonanda, D. A. (2017). PENINGKATAN PEMAHAMAN SISWA MATA PELAJARAN PKn TENTANG SISTEM PEMERINTAHAN MELALUI METODE M2M (MIND MAPPING) 11 KELAS IV MI MAMBAUL ULUM TEGALGONDO KARANGPLOSO MALANG. Jurnal Cakrawala Pendas, 3(1). https://doi.org/10.31949/JCP.V3I1.410