Digital Comic In The Modern Era

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ABSTRACT

Comics are illustrated stories that are easy to swallow and fun (usually in newspaper magazines or in book form). In addition to the aforementioned comic understanding, comics can also be interpreted as literary works in the form of stories presented in the form of images that have extraordinary figures in history. Comics also have interesting characteristics for readers even in modern times like now comics can be read in various places without having to bring comic books even from the smartphone you use you can read the comics you want.

Keywords; modern era,digital,books, and smasrtphone

1. INTRODUCTION

Far from a civilization theory based on futurologist Alvin Toffler, then we is in the latter half of the third wave of leadership is civilization news technology. A growing news citizen & as a community. Along with the technological sophistication of the long gap, another problem is the growth of the internet.The picture of the community and this is even further imagined in the form of conditions for Marshall McLuhan's world hometown, where a news can be accessed, food, is discussed by anyone without clear demographic and even social boundaries.Toffler further explained, one of the signs that occurred in the wave.

The third is technology personalization, namely technology that is in the second wave created for industrial needs, then in this era technology is reinvented to be used individuals use less production capacity & lower prices. Therefore, work that is usually done on a large and massive scale can be reduced to scale small, such as the print media industry, the use of which is controlled personally by the senses, for example computer, copier or printing limited, so each individual or small can create their own print media, for example what happened in the punk music scene has created his own media (zine) since 1970.

2. PROBLEM STATEMENT

Comics are defined as a series of sequential images. This means that comics have been part of human culture since ancient times, because humans are communicated in the form

of images on the walls of caves, temples, or buildings. Because of that, we can't say for sure when the comic will come out.Hundreds of years of human civilization have given birth to manga in various forms. In 1873, Swiss National Comic Artist Rudolf Topfer claimed a comic entitled The Adventures of Obadiah Oldbach as the first comic in Europe and even the world.

In 1884, Ally Sloper's comic "Half Holiday" was published and is considered the world's first magazine comic. In 1895, another breakthrough came in the world of comics. This is the emergence of serialized comics with fixed characters. Titled Hogan's Alley, the comic was created by Richard Felton Outcault and is credited with starting the comics renaissance in America.In 1895, R. F. Outcault published a comic book, which is considered the world's first. The book, entitled The Yellow Kid, is the starting point for modern comics in the world. Comic books then reached their golden age in the 1930s. Comic characters such as Flash Gordon, Dick Tracy, Tarzan, Superman, Batman, and Captain Marvel appeared at that time. Wow... that's a long story. The cartoon story isn't over yet. From there, my love for comics spread.

One in America and one in Europe. The comic that became popular in Europe in 1929 was Tintin of Hergé. The adventure drama "Tantan" dominated the market until the 1970s. Not only the famous European comic "Tim and Struppi" at that time, but also "Asterix" by Uderzo. This is how comics developed in Europe and America. What about Asia? Comics began to develop after World War II. In Asia, Comic has grown to become the largest comic producer in Japan. Osamu Tezuka, a manga artist known for "New Treasure Island" and "New Treasure Island". At that time, the development of manga in Japan was very rapid. when to indonesia The birth of comics in Indonesia began in the 1930s with the cartoon "Puton" by Ko Wang Ghee which was published in Sinpo. In the late 1940s, many American comic strips were published by local publishers. With the proliferation of American comics, Siau Tik Kway developed a comic that managed to outperform Tarzan's popularity among local readers. Inspired by the popularity of American comics, R.A. Kosashi created Indonesian-style superhero characters. Other superhero characters also appeared, such as Siti Gahara, Puteri Bintang, and Garuda Putih. What was the first Indonesian manga published? It turns out that Abdul Salam's work is titled The Story of the Occupation of Jogja.

The period from 1960 to 1970 is considered by many to be the heyday of Indonesian comics.In the 1980s, the comic industry in Indonesia entered a dark period. Despite experiencing difficult times, the Badut Comics Tumaritis (Petruk, Garen, Bagong) from Tatang S. were able to gain a foothold in the Indonesian comic market by selling their comics through mobile toy sellers.

After the Reformation, the world of Indonesian comics was revived. The comic strip Imperium Majapahit by Yang Mintaraga and the legendary Saung Campre Dui Cohen became the catalyst for the revival of comics in Indonesia. Comics are not just printed. Comics develop through other media. After decades of comics existence, South Korean print comics are facing a difficult time. Then came digital comics in South Korea. Webtoon is a term for comics or animations that are published chapter by chapter through

several Korean sites such as Naver and Daum. Webtoons are also known as internet comics or webcomics. Since its launch in 2002, South Korean webtoons have rapidly increased their market share and are estimated to have generated revenues of up to 150 billion won.

The reach and distribution of digital comics is expanding and fast. The number of digital comic readers continues to increase from year to year. Not only in South Korea, digital comic readers are spread throughout South Korea. Indonesia is also one of the countries with the highest digital comic readers. In 2015, there were more than 6 million e-comic readers. We hope that CIAYO Comics will expand the world of digital comics, become a workplace for manga artists, and bring them closer to readers.

3. LITERATURE REVIEW

There is a saying, "A great country is a country that values history." Likewise with the world of comics (Indonesian/local comics) that you read, buy, or collect a lot at this time. Celgam can be mapped in terms of historical value, reflection of thought, and intergenerational culture. Cartoons that are now alive cannot be separated from the existence of old comics decades ago. A comic lover ideally has a great curiosity about its history. This article only refreshes our knowledge about the traces and history of comics and the aspects that influence them. Basically, this Celgam predecessor actually has its own "style". namely the relief of the temple, then in the form of Wayang Bevel and Wayang Kulit. These three types of comics existed long before the advent of American comics. Start with relief.

Comics can be identified as a book or paper with pictures and stories. In his 1972 treatise on comics (Komik Indonesia; Popular Cendekia Library; 1998), Marcel Boneff explains how the antecedents and history of comics have been discovered since prehistoric times. Although not similar to today's comics, the reliefs on the temple walls actually tell the story of the image. Likewise with Wayang Bevel, which tells stories through images on the surface of cloth rolls. The first evidence of the origin of cartoons was found in stone religious monuments.

3.1 State of The Art
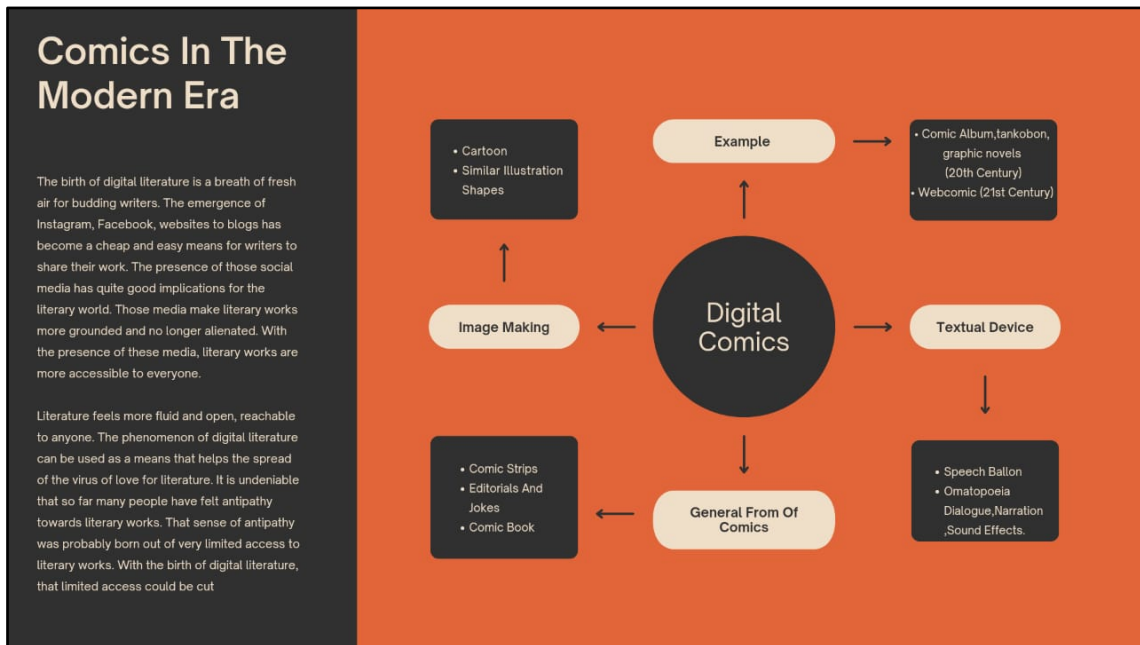
3.2 Framework
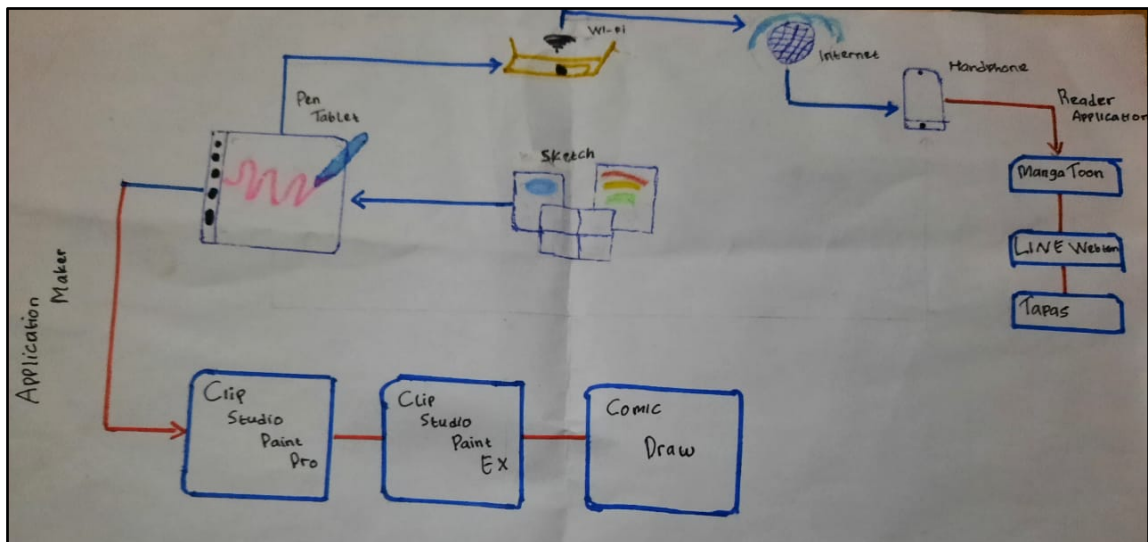
4. METHODOLOGY

My methodological approach is inspired by previous frameworks and journals and focuses on the title "Digital Comics Comics In The Modern Era". In yesterday's assignment, I wrote a journal of the same name, but this time I will report on the framework and the journal. Modern digital comics are very demanding, and even without a comics app, we already have comics. I know how to make it. social networks read media that have been circulating. Whether you don't have a book with you or want to read comics outside or inside your home, technology is constantly evolving.

4.1. Study Area

1. *Comics have existed since the 19th century in the form of comic strips*
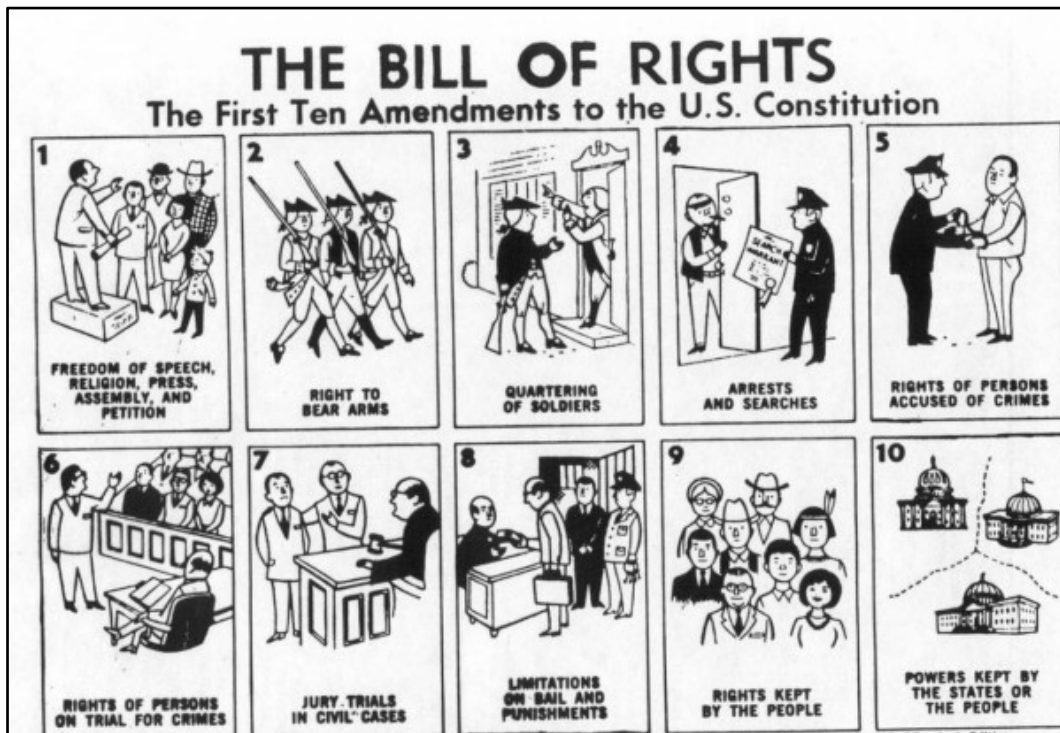
No one knows for sure when comics were born, but comics are believed to have existed since the early 1800s in Europe and America there. One of the well-known comics in that century was the comic from Thomas Nast entitled Boss Tweed in the form of a comic strip, a comic that contained only a few panels (no more than six panels).

2. *Comics used to be used to criticize government and society in the form of satire*
   Nast's comics, which appeared in the 1870s in New York, are considered to have succeeded in overthrowing a corrupt government in his time. This can happen because of the heavy criticism in the comic which is formed in a funny and pathetic style.But over time, comics began to have a continuous story that couldn't be conveyed through just a few panels.This created the emergence of comic books.
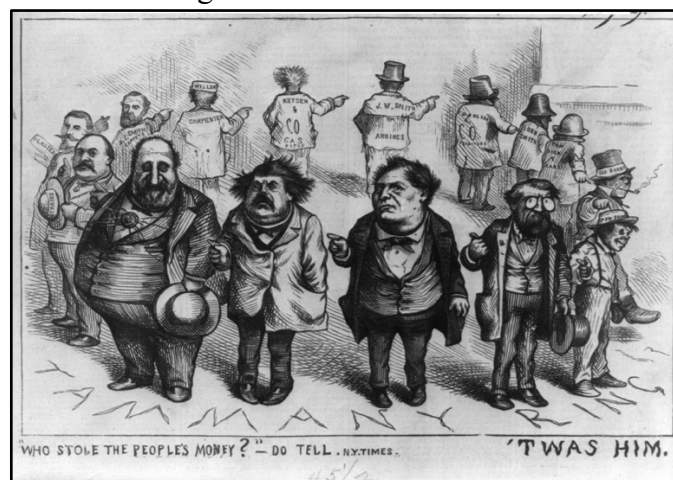
3. *Before being a book, comics were mostly featured in newspapers*

Many comics are published initially as part of newspaper content. At that time no one could read comics if they didn't buy a newspaper first, but as the times progressed the comic strips began to be collected and started to be printed themselves.Unfortunately, most of the comics in the 19th century were mostly not made into books, so they disappeared. Only a few titles have survived to this day, such as Tintin, Popeye and Tarzan.

4. *The history of comics goes into six periods*

These periods are the platinum period (1897 – 1938), the golden age (1938 – 1956), the silver age (1956 – 1970), the bronze age (1970 – 1985), the dark period (1985 – 1996) and the modern period (1996 – 1957). now).

4.2 Algoritma
comic development from around the world.
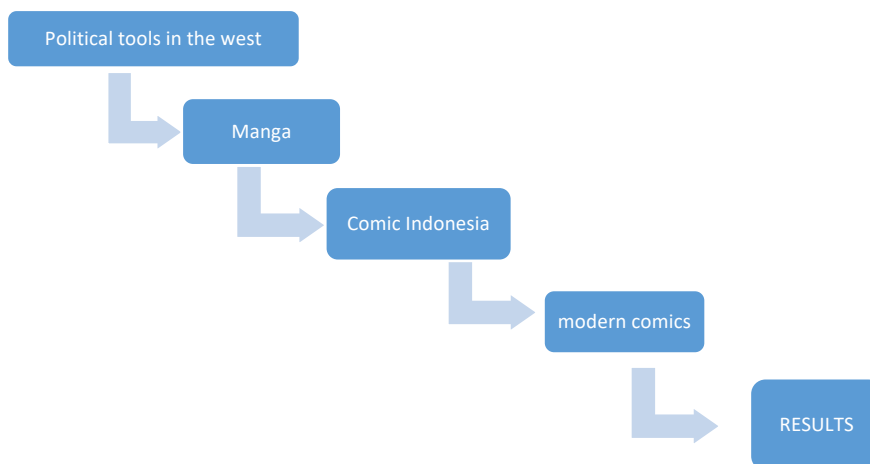
5. RESULTS

Comics are media stories that contain a variety of content including images, panels, speech bubbles,story and characterization. Aspects of the story in comics are identified in a series of pictures governed by panels involving characterization and speech bubbles. in digital comics can be easily accessed through digital media such as smartphones, tablets and computer screens online because it is supported by the use of media application.

5.1 Description of development

In this study, the data are analyzed to obtain a learning tool in the form of a valid and effective media. If these requirements are met, the learning comics media prod- ucts developed are suitable for use. To find out the quality of the development of comic media both from the aspect of media and material aspects, as well as to learn the students' responses to the comic, the data which are originally in the form of scores are converted into qualitative data (interval data) on a scale of four. The refer- ence for changing the score to a scale of four according to the Technical Guidelines for Arranging the Affective Assessment can be shown in Table 1.

Table 1. Conversion of Actual Score into Interval Data

Score Range	Score	Category
Mi+1.5 SDi ≤ X≤ Mi + 3 SDi	A	Very Good
Mi + 0 SDi ≤ X < Mi + 1.5 SDi	B	Good
Mi – 1.5 SDi ≤ X< Mi + 0 SDi	C	Quite Good
Mi - 3 SDi ≤ X < Mi – 1.5 SDi	D	Less Good

Notes:
X = actual score (score the student achieved)
Mi = 1/2 (maximum score + minimum score)
SDi = 1/6 (maximum score – minimum score)
Maximum score = number of criteria X maximum score
Minimum score = number of criteria X minimum score

$$g = \frac{\bar{x}_{post} - \bar{x}_{pre}}{100\% - \bar{x}_{pre}}$$

At the beginning of the development stage, several definitions are conducted in- cluding some activities: library and field analysis. Once they are completed, it is con- tinued with the development stage which includes the activities of making comic media drafts, collecting all materials needed in making comic media, making prod- ucts, conducting reviews to get validation to media experts, material experts, and teachers proceed with the analysis and revision of the product considering the com- ments and suggestions from the media expert, the material, and the teacher. When the first revision process was done, the initial product of comic media is packed as a the- matic-integrative learning media. Draft products that have been developed are then subjected to limited testing and field trials (at school).

5.2 Description of product trial

Trials at the product validation stage by media experts, material experts, and teachers are conducted to obtain valid data from material aspects and media aspects. Mini- mum component validity requirements get an average score in either category. If the category has reached good, then the component has been declared feasible. Data on product validation by media experts and material experts are presented in Table 2 and Table 3, while for the product assessment results by the teacher are shown in Table 4.

Table 2. Results of the Product Validity by Media Experts

No	Evaluation Aspects	Total Score	Criteria
1	Anatomy of comics	25.00	Very Good
2	Design and color	15.00	Very Good
3	Overall appearance	28.00	Very Good

Table 3. Results of the Product Validity by Material Experts

No	Evaluation Aspects	Total Score	Criteria
1	Material Approriateness	23.00	Very Good
2	Material Accuracy	16.00	Very Good
3	Material Updates	4.00	Very Good
4	Linguistic	20.00	Very Good
5	Character Value	7.00	Very Good
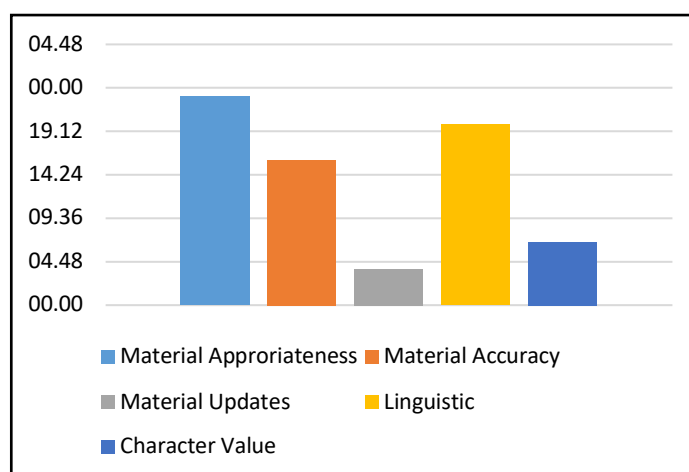
Table 4. Results of the Product Validity by Teachers

No	Evaluation Aspects	Total Score	Criteria
1	Anatomy of Comics	26.00	Very Good
2	Design and Color	16.00	Very Good
3	Overall Appearance	27.00	Very Good
4	Material Appropriateness	21.00	Very Good
5	Material Accuracy	15.00	Very Good
6	Material Updates	4.00	Very Good
7	Linguistic	19.00	Very Good
8	Character Value	8.00	Very Good
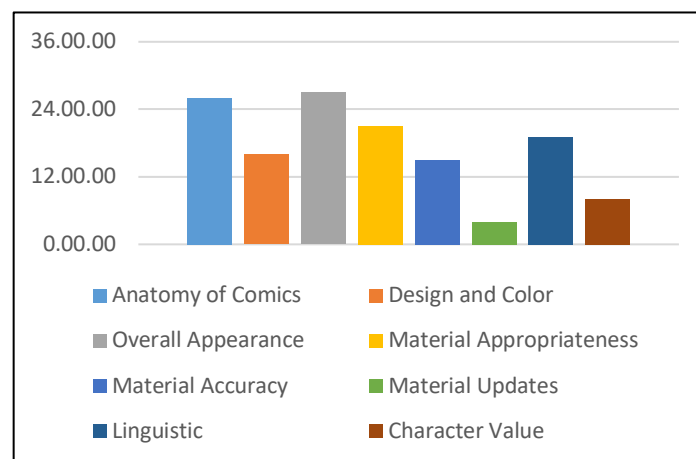
Based on Tables 2, 3 and 4, the results of product validation conducted by Media Experts, Material Experts and Teachers showed very good results in all aspects so that the comic media developed were considered valid and worthy of further testing. Sug- gestions from experts include: improving the spelling in comic media conversations, selecting the student's character to be adjusted, and correcting the position of the im- age so that it is more adapted to the message from the developed media. With these results, the testing process continues to the next stage, namely limited trials. The next step is the limited trial. Limited trials are given to six students at grade IV. Data generated regarding students' answers to the use of comic media during the learning process. Data on the outcomes of student responses to the use of comics can be shown in Table 5.

Table 5. Results of Student Responses to the Use of Comic Media

| No	Evaluation Aspects	Total Score	Criteria
1	Media	19.17	Very Good
2	Material	12.00	Very Good
3	Linguistic	7.17	Very Good
4	Character	7.33	Very Good
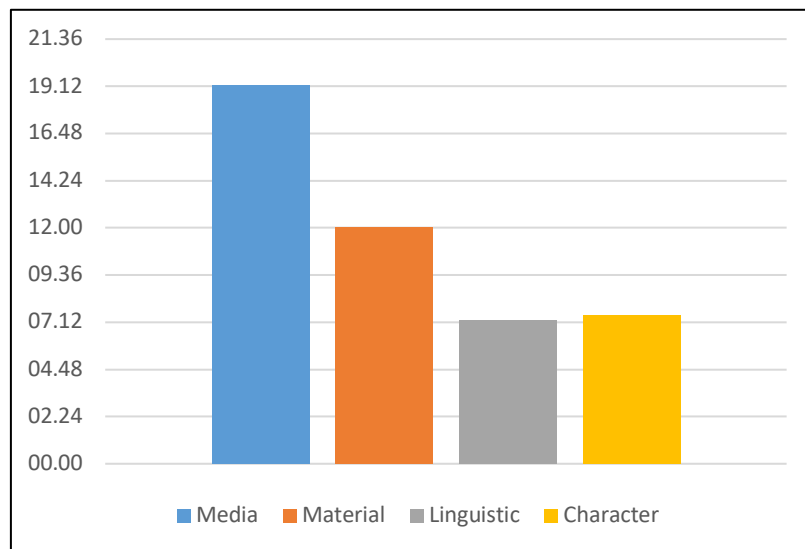
Based on Table 5 above, the results of the analysis of student responses were obtained in the excellent category for all aspects. Media aspects of the student questionnaire included the anatomy of comics, design of comics and overall appearance. Material aspects in the student questionnaire include Material Appropriateness, Material Accuracy, and Material Updates. The advice obtained from the limited test is the use of language in comic conversations and revamping of some blurred images. Once the revision referring to the input obtained in the limited trial is complete, the comic me-

dia product was then tried out in the field experimental or trial. Field experimental or trial were done to 20 students in grade IV. In this trial, learning was carried out with a comic media product that was developed using a before-after design. Field trials were conducted to determine the feasibility of comic media that had previously been tested on a smaller scale to define the effectiveness of the usage of comic media. The data obtained from the field test are student response data, observations of student and teacher learning outcomes by observers, student character data before and after learning with comic media (initial questionnaire- final questionnaire), and student character observation data. From the student response data, the average student assessment of learning with comic media is in the very good category. Data on the outcomes of student answers to the use of comics in field trials can be shown in Table 6.

Table 6. Student Responses to the Use of Comic Media in Field Trials (n= 20)

No	Evaluation Aspects	Total Score	Criteria
1	Media	19.65	Very Good
2	Material	15.50	Very Good
3	Language	7.70	Very Good
4	Character	7.35	Very Good
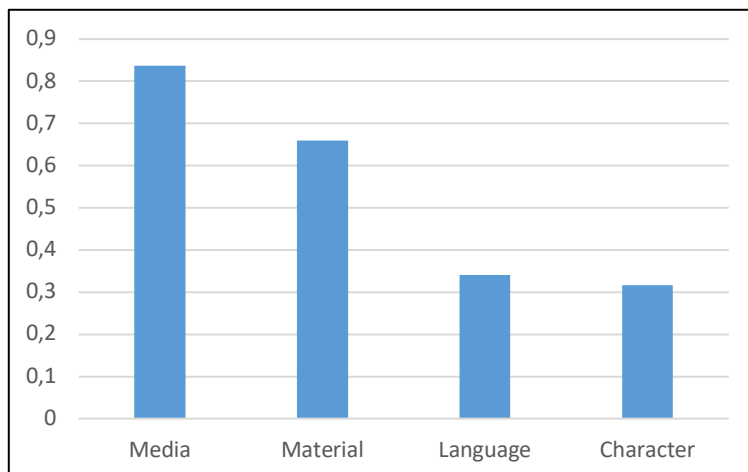
From the student response data in the field test as presented in Table 6, it can be seen that the average student assessment of learning with comic media is in a very good category for the four aspects used as an assessment. These results are consistent and tend to be higher than the results of limited trials. This shows that by revising the use of language in comic conversations and the improvement of the blurry images that have been done previously proved able to increase students' responses to the use of Comic Media in learning. Data on the effectiveness of the use of comic media was obtained from observations of the implementation of student and teacher learning by observers and the character questionnaire values before and after the use of comic media. The implementation of learning by the teacher during the use of comic media from the first day to the fifth day shows the percentage of 78%, 82%, 85%, 95%, and 100%. This shows that the teacher has carried out learning activities by the learning plans that have been made. Besides learning by using comic media has reached the expected target. The results of observer calculations in the field trials show the per- centage achievement in six days about 72%, 85%, 90%, 95%, and 100%. This shows that students have implemented learning activities by the learning plans that havebeen made and the use of comic media is in line with the expected targets. Field trials are also to find out the effectiveness of comic media in improving the character of discipline and student responsibility. Student character development, data obtained through questionnaires filled out by students and observational data by observers.

The results of the initial and final student questionnaire on the character of disci- pline can be seen in table 7, while in the character of responsibility can be seen intable 8. Both tables show the value achieved by students through a questionnaire that was distributed before the trial use of comics (initial) and after the test try using com- ics (end). The analysis used is a descriptive approach by looking at the average value between before (initial) and after (final) the use of comic media in learning. In addition to the descriptive approach, a Gain Analysis is also carried out to see how much change has occurred. To get the results of a more convincing analysis, a significance test of the pre and post comparisons was carried out using the Wilcoxon test.

The results of the initial and final student questionnaire on the character of disci- pline can be seen in Table 7, while for the character of responsibility can be shown in Table 8.

Table 7. Results of Discipline Characteristics Questionnaire in Field Trials

Score	Initial	Final
Maximum	80	95
Minimum	60	85
Mean	69.75	90.75
Gain	0.69	(Moderate)
p-value	0.000	

Table 8. Results of Responsibility Characteristics Questionnaire in Field Trials

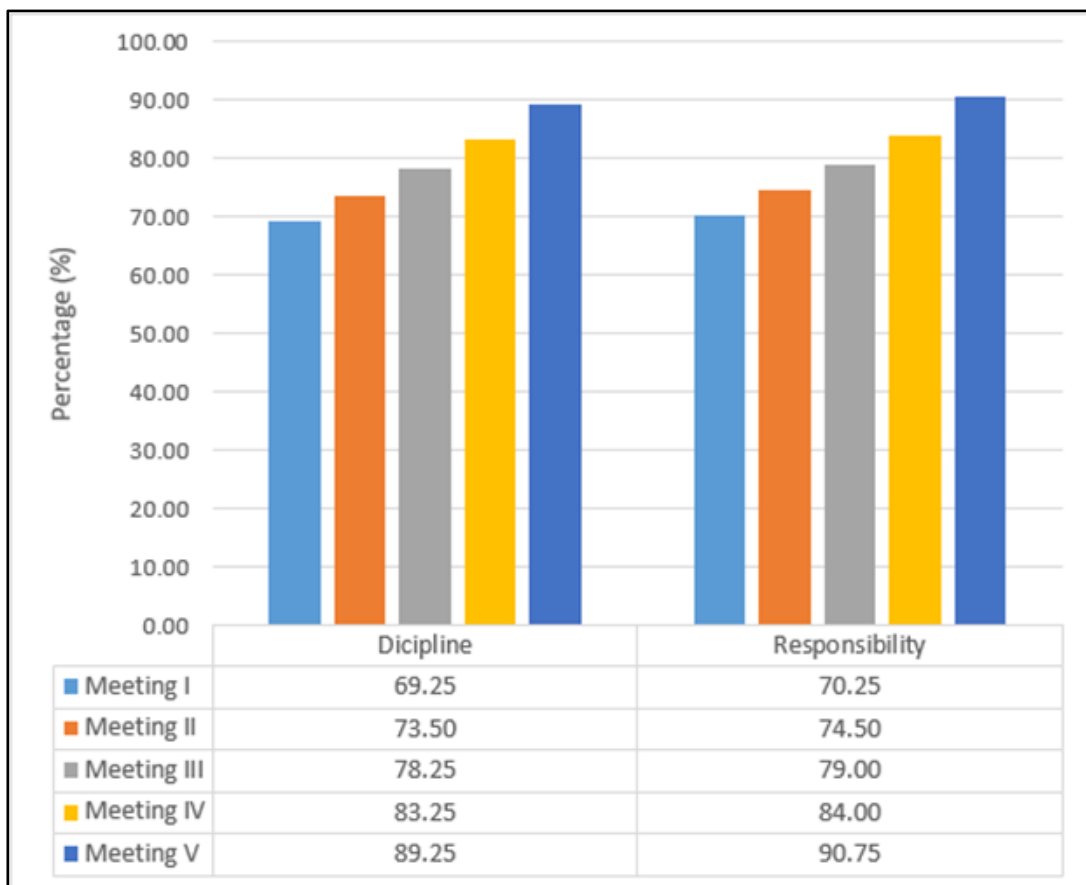| Score	Initial	Final
Maximum	75	95
Minimum	60	85
Mean	70.00	90.50
Gain	0.68	(Moderate)
p-value	0.000	
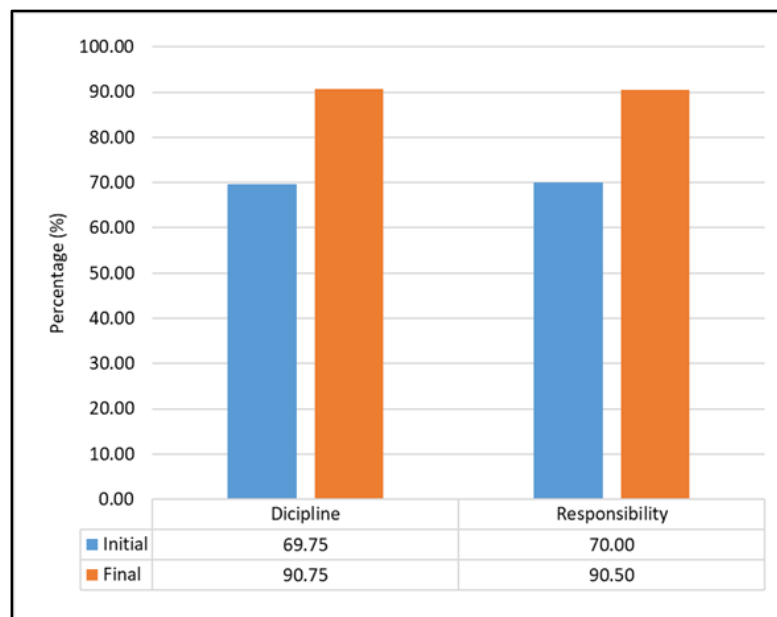
The achievement of an increase in student discipline code shown in Table 7 and Figure 2, analyzed by using the gain. The results of the analysis of the character of student discipline questionnaires were obtained gain scores, $\langle g \rangle = 0.69$, an increase in the character of discipline is included in the category of "Medium", and created arranged the results of the comparative test using the Wilcox-on test shows that an increase in the character of the discipline is declared very signif icant (p-value <0.01). These results indicate that the use of Comic Media in learning can improve the character of student discipline. Achievement of increasing the char- acter of student responsibility is shown in Table 8 and Figure 2, also analyzed using the gain technique. The results of the questionnaire analysis of the character of student responsibility obtained gain score, $\langle g \rangle = 0.68$.

The increase in the character of responsibility, included in the category of "Moderate", and arranged the results the results of a comparative test using the Wilcoxon test showed that the increase in the character of responsibility was stated to be very significant (p- value <0.01). These results indicate that the use of Comic Media in learning can im- prove the character of student responsibility. In addition to using a questionnaire, the development of discipline, character values, and student responsibility is also seen through observation techniques observed by observers of 20 students in field trials. The results of observations on the achievement of Discipline and Responsibility of students from the first meeting to the fifth meeting can be shown in Table 9 and visually presented in Figure 3.

Table 9. Data of Character Observation in Field Trials

No	Character Value	Meeting				
		I	II	III	IV	V
1	Discipline	69.25	73.50	78.25	83.25	89.25
2	Responsibility	70.25	74.50	79.00	84.00	90.75

	Dicipline	Responsibility
▪ Meeting I	69.25	70.25
▪ Meeting II	73.50	74.50
▪ Meeting III	78.25	79.00
▪ Meeting IV	83.25	84.00
▪ Meeting V	89.25	90.75

5. CONCLUSION

In the report that I made, I have explained about comics from ancient times to the present. I even explained the history of comics, and also the types of comics from comic book form to digital form. In the report that I made, I have explained about comics from ancient times to the present. There are also types of comics such as; comic strips, comic books, comic humor, and adventure. Comics originated in 12th century Japan, modern comic strips emerged in Japan in the early 20th century, and magazine and comic book output grew rapidly in the post-World War II era with the popularity of cartoonists such as Osamu Tezuka.

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