

PERCEPTIONS AND VISUAL EXPERIENCES OF JUNIOR HIGH STUDENTS USING DIGITAL COMICS FOR ILLUSTRATION LEARNING

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Abstract. The development of Information and Communication Technology (ICT) has encouraged the use of digital learning media in education. In art education, particularly illustration at the junior high school level, visual media play a crucial role as they relate to students' perceptions and visual experiences. This study aims to analyze the perceptions and visual experiences of ninth-grade students regarding the use of digital comics and to examine the role of digital comics in supporting the understanding of illustration materials. The study employed a qualitative approach with ninth-grade students and art teachers at SMP Negeri 10 Semarang as subjects. Data were collected through questionnaires, observation, interviews, and documentation, and were analyzed using data reduction, data presentation, and conclusion drawing. The results indicate that students' perceptions and visual experiences of digital comics are generally positive in terms of visual appeal and ease of understanding illustration materials, although this interest does not always correspond to increased learning motivation and creative drawing engagement across all students. From the teachers' perspective, digital comics are perceived as a promising medium for supporting illustration learning aligned with students' characteristics, yet their effectiveness depends on the availability of facilities and appropriate teaching strategies.

Keywords: Visual Perception, Visual Experience, Digital Comics, Learning Media, Illustration.

1. Introduction

The development of Information and Communication Technology (ICT) in the 21st century has brought significant changes to education, particularly in the use of digital learning media (Roza et al., 2023). In art education, especially illustration, visual media play a crucial role as they relate to students' perceptions and visual experiences. Interactive digital learning media can facilitate concept understanding, enhance student engagement, and foster creativity (Depita, 2024).

One of the emerging digital media is digital comics, which combine images, text, color, and narrative in a digital format. Digital comics serve not only as visual aids but also as interactive media that can enhance creativity, student engagement, and interaction between learners and teachers (Khotimah & Hidayat, 2022). As a visual illustration tool, digital comics help students understand abstract materials, develop imagination, and communicate learning content in a more engaging and accessible manner (Amaliyah & Rande, 2024; Nur Rahmah et al., 2025).

Students' perceptions and visual experiences are critical in using digital comics as a medium for illustration learning. Visual perception involves the ability to interpret information through sight (Sarajar, 2021), while visual experience encompasses the subjective and emotional interaction with visual elements, which can influence learning motivation (Silalahi, Simarmata, & Samosa, 2024). Although digital comics have great potential, research on students' perceptions and visual experiences in Indonesian public schools, including SMP Negeri 10 Semarang, is still limited (Lestari, Ni'am, & Kholidin, 2025).

Based on this background, this study aims to: (1) analyze the perceptions of ninth-grade students regarding the use of digital comics as a medium for illustration learning, (2) examine students' visual experiences in using digital comics, and (3) evaluate the role of digital comics in supporting the understanding of illustration materials. This study is expected to provide insights for teachers, learning media developers, and future researchers in developing innovative illustration learning methods and media that align with students' characteristics.

2. Results and Discussion

2.1 Students' Perceptions of Digital Comics as an Illustration Learning Medium

Students' perceptions of digital comics were analyzed based on questionnaires completed by 33 students of class IX C. Perception forms the basis of students' responses, interest, and learning experiences with educational media. According to visual perception theory, visually stimulating media can facilitate information reception and enhance students' learning experience (Sarajar, 2021). Digital comics, which combine visual, textual, and narrative elements, have the potential to provide a more meaningful and enjoyable learning experience.

Table 1. Students' Perceptions of Digital Comics as an Illustration Learning Medium

Perception Component	Indicator	Student Percentage (%)
Interest	Quite interesting	70,3
	Very interesting	18,5
	Less interesting	11,1
Most Liked Aspect	Story	59,2
	Illustration	51,8
	Color & Characters	25,9
Influence on Motivation to Learn	Increased	51,8
Illustration	Not sure / other	48,2
Perception of Digital Comics as Learning Media	Can be used	55,5
	Very usable	11,1
	Less usable	33,3
Visual Appearance	Quite attractive	66,6
	Very attractive & easy to understand	33,3

Source: Author, 2025

Based on Table 1, the majority of students considered digital comics quite interesting (70.3%), with the story as the most liked element (59.2%), followed by illustrations (51.8%) and color & characters (25.9%). Approximately half of the students (51.8%) reported an increase in motivation to learn illustration, although others did not experience significant motivational effects. Regarding the use of digital comics as learning media, most students perceived it as usable (55.5%) or very usable (11.1%), while 33.3% considered it less effective. The visual appearance was rated attractive and easy to understand, with 66.6% finding it quite attractive and 33.3% very attractive, demonstrating the effectiveness of digital comics as a visual learning medium. Overall, the table illustrates that digital comics have high appeal, relevance, and pedagogical potential, although their effectiveness may vary depending on individual student characteristics.

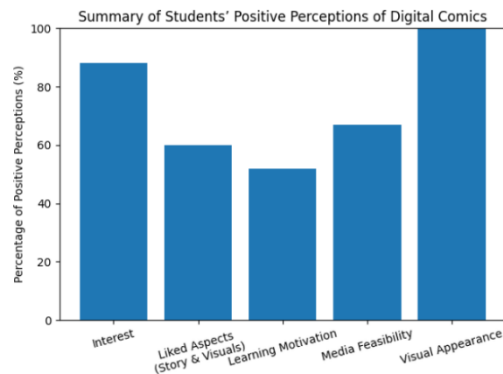


Figure 1. Bar Chart of Students' Perceptions

Source: Author, 2025

2.1.1 Implementation of Comic Drawing Learning in Class IX C

Comic drawing learning was conducted in two meetings, each lasting three hours. The first meeting focused on introducing the basic concepts of drawing, defining and explaining the function of comics as educational media, and the steps of creating a comic, from theme selection, story development, storyboard creation, panel sketching, character and background drawing, dialogue insertion, to coloring. Students were also assigned to find digital comic references as visual inspiration.

In the second meeting, students created and completed their digital comic works based on the references selected. Out of 33 students, only 11 (33%) submitted their assignments on time. Students who submitted on time demonstrated the ability to organize panels sequentially, draw expressive characters, and design dialogues according to the story. Other students were still at the sketching stage and required additional guidance, particularly in time management, drawing techniques, and visual story composition.



Figure 2. Learning Activities in Class IX C

Source: Author, 2025



Figure 3. Students' Works of Class IX C

Source: Author, 2025

Overall, students' perceptions indicate that digital comics are feasible and have potential as an illustration learning medium. Digital comics can capture students' attention and facilitate understanding of the material through communicative visuals. However, initial interest does not always correspond directly with increased learning motivation or task completion. The effectiveness of digital comics can be optimized through appropriate teaching strategies, teacher guidance, and integration with practical drawing activities, ensuring all students can engage effectively according to their learning characteristics.

2.2 Students' Visual Experience in Using Digital Comics

The visual experience of Grade IX C students at SMP Negeri 10 Semarang in using digital comics for illustration learning was analyzed based on questionnaire data from 33 students. Visual experience reflects students' responses to the visual aspects of digital comics, including image attractiveness, color appeal, ease of understanding the storyline, readability, influence on focus and memory, enjoyment of learning, creative encouragement, and the role of digital comics in reducing learning boredom.

Table 2. Students' Visual Experience in Using Digital Comics

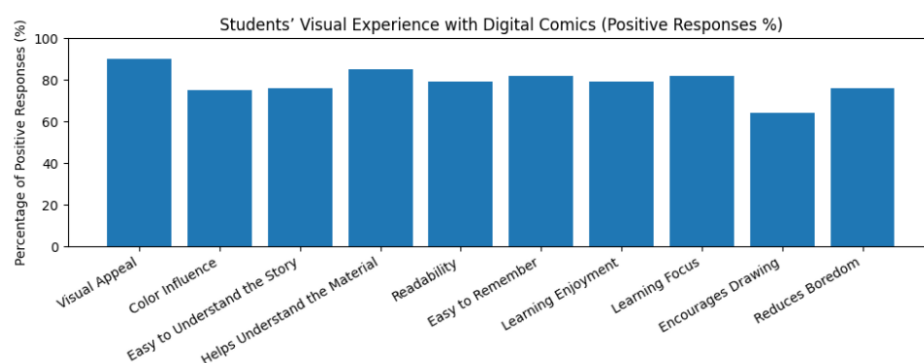
Visual Experience Component	Indicator	Percentage of Agree
Visual attractiveness	Attractiveness of digital comic images	90,9%
Color appeal	Influence of colors on learning enthusiasm	75,7%
Narrative comprehension	Ease of understanding the storyline	75,7%
Learning support	Digital comics help students understand illustration material	84,8%
Visual readability	Readability of text and images on digital devices	78,8%
Memory retention	Ease of remembering learning material through digital comics	81,8%
Learning enjoyment	Enjoyment of learning compared to conventional methods	78,8%
Learning focus	Visual appearance of digital comics helps learning focus	81,8%
Creative encouragement	Encouragement to draw illustrations after viewing digital comics	63,6%
Boredom reduction	Digital comics reduce learning boredom	75,7%

Source: Author, 2025

Based on Table 2, students' visual experience of using digital comics shows a generally positive tendency across most components. The highest percentage was found in visual attractiveness of digital comic images (90.9%), indicating that the visual appearance successfully attracted students' attention in illustration learning.

Color appeal, narrative comprehension, and boredom reduction each reached 75.7%, suggesting that digital comics created a more enjoyable and less monotonous learning atmosphere. The learning support component also showed a relatively high percentage (84.8%), indicating that digital comics functioned not only as visually appealing media but also as learning tools that supported students' understanding of illustration material.

Visual readability and memory retention also showed high percentages, at 78.8% and 81.8%, respectively. These findings indicate that the digital comic display was considered clear and comfortable to read, and that the visual presentation helped students remember the learning material. The visual appearance of digital comics also supported students' learning focus (81.8%).

**Figure 4.** Bar Chart of Students' Experiences

Source: Author, 2025

However, the creative encouragement component showed a relatively lower percentage (63.6%) compared to other components. This suggests that positive visual experience does not automatically encourage all students to actively engage in drawing practice.

Overall, the ten visual experience components measured in this study comprehensively represent students' interaction with digital comics, covering visual appeal, comprehension, learning comfort, and affective responses. The students' visual experience of using digital comics in illustration learning can therefore be categorized as positive, although its influence on creative engagement varies among students.

2.1.1 Analysis of Students Comic Strip Works

After the implementation of illustration learning using digital comics, Grade IX C students at SMP Negeri 10 Semarang produced comic strip works as an application of the learning materials. These works were analyzed to examine the extent to which students were able to apply comic illustration concepts in visual narrative form. In this article, the analysis focuses on three comic strip works selected as representatives of the 33 students' works. The analysis is conducted based on three main aspects, namely visual elements, story elements, and composition principles, as indicators to evaluate the visual characteristics and narrative quality of the students' comic strip works.

1. Comic Strip Work by Ervandu Lintang Pamungkas – Class IX C



Figure 5. Comic Strip Work by Ervandu Lintang Pamungkas – Class IX C

Source: Author, 2025

Table 3. Analysis of Comic Strip Work by Ervandu Lintang Pamungkas – Class IX C

Component	Description
Visual Elements	6 panels arranged in 3×2 layout; cartoon-style illustrations with clear character expressions; readable dialogue balloons; minimal sound/gesture effects; bright and cheerful coloring matching hobby theme.
Story Elements	Theme: hobby evolving into small business; Characters: main child character and supporting buyer; Plot: interest → collection → profit; Setting: toy shop, bedroom, outdoors; Language: simple and casual for young readers.
Compositional Principles	Unity: all elements support the theme; Balance: panels show process and result evenly; Rhythm: gradual story progression; Focal Point: collection room and money scene; Proportion: consistent character size and spacious panels.

Source: Author, 2025

2. Comic Strip Work by Della Diantika – Class IX C

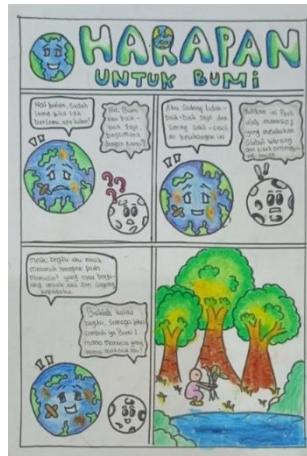


Figure 6. Comic Strip Work by Della Diantika – Class IX C

Source: Author, 2025

Table 4. Analysis of Comic Strip Work by Della Diantika – Class IX C

Component	Description
Visual Elements	4 panels arranged sequentially; cartoon-style illustrations with expressive faces; readable dialogue balloons; subtle visual symbols indicate emotions; soft colored pencil shading emphasizes environment.
Story Elements	Theme: environmental awareness; Characters: Earth and Moon; Plot: greeting → complaint → sympathy → hopeful ending; simple to detailed backgrounds; Language: clear and easy for children/teens.
Compositional Principles	Unity: elements consistently support the theme; Balance: panels arranged evenly; Rhythm: smooth progression from problem to hopeful ending; Focal Point: Earth's expression → Moon's sympathy → hopeful message; Proportion: characters and panels sized harmoniously.

Source: Author, 2025

3. Comic Strip Work by Chelsea Elfira Putri – Class IX C



Figure 7. Comic Strip Work by Chelsea Elfira Putri – Class IX C

Source: Author, 2025

Table 5. Analysis of Comic Strip Work by Chelsea Elfira Putri – Class IX C

Component	Description
Visual Elements	8 vertically arranged panels; semi-realistic illustrations with clear expressions; readable dialogue balloons; simple motion lines; black-and-white shading distinguishes objects and background.
Story Elements	Theme: helping others and applying Pancasila values; Characters: two students, one struggling and one helping; Plot: complaint → assistance → cooperation → moral message; Setting: school corridor; Language: casual and easy to understand.
Compositional Principles	Unity: elements support the theme; Balance: panels and text distributed evenly; Rhythm: smooth

Principles narrative flow; Focal Point: struggling student → helper → moral message; Proportion: characters and objects sized harmoniously.

Source: Author, 2025

The analysis of students' comic strip works indicates that students were able to apply visual elements, story elements, and composition principles with varied levels of development. These findings suggest that digital comic-based illustration learning supports students' visual experiences, particularly in terms of visual appearance, conceptual understanding, and learning atmosphere. Thus, the students' comic strip works can be viewed as representations of their visual experiences after participating in digital comic-based illustration learning, although the motivation to engage in creative drawing has not developed evenly among all students.

2.3 Teacher's Perception of Digital Comics as an Illustration Learning Media

The role of digital comics as learning media for illustration was analyzed based on questionnaire data and interviews with the art teacher at SMP Negeri 10 Semarang. The analysis focused on three main components: (1) the teacher's perception of digital comics as learning media, (2) the teacher's experience in using digital learning media in illustration lessons, and (3) the teacher's expectations and suggestions regarding the development and implementation of digital comics at school. These components provide an overview of the function of digital comics as supporting media for illustration learning from the practitioner's perspective.

Table 6. The Role of Digital Comics as Learning Media for Illustration According to the Teacher

Component	Key Indicators	Key Findings
Teachers' perceptions of digital comics	Knowledge about digital comics, potential, advantages and limitations	Digital comics are understood as a visual reference source that is close to students' habits; it has potential as an illustration learning medium (Irene, 2025).
Teachers' experiences using digital media	Forms of digital media utilization, student responses, advantages and challenges	Digital media (especially video tutorials) helps deliver illustrative material visually and systematically; students show a positive response; constraints include device availability and internet access (Irene, 2025).
Teachers' hopes and suggestions	Optimization of implementation, readiness of infrastructure facilities	Digital comics are considered relevant to student characteristics; support from facilities, internet networks, and device management is required for more equitable implementation (Irene, 2025).

Source: Author, 2025

Based on Table 3, digital comics are perceived by the teacher as learning media that align with junior high school students' learning characteristics, particularly their familiarity with visual digital resources. In terms of experience, digital media support the delivery of illustration materials in a more concrete and visual manner, which facilitates students' understanding of drawing procedures. Student responses to digital media use are generally positive, although technical constraints related to device availability and internet access remain.

Furthermore, the teacher's expectations highlight the importance of adequate facilities and

infrastructure to optimize the implementation of digital comics in learning activities. Therefore, digital comics function as supportive learning media for illustration when integrated with appropriate instructional strategies and supported by sufficient digital learning infrastructure at school (Irene, 2025).

3. Conclusion

The findings indicate that digital comics are positively perceived by students as an instructional medium for illustration learning, particularly in terms of visual appearance, image clarity, color selection, storyline, and ease of understanding. The visual appeal of digital comics makes the learning process more engaging and less monotonous, aligning with students' daily interaction with digital visual content. This visual attractiveness contributes to increased focus, comfort, and attention during classroom activities; however, positive perceptions do not necessarily translate into uniformly increased learning motivation.

In terms of visual experience, the use of digital comics provides a more concrete, communicative, and enjoyable learning experience by integrating images, text, and narrative flow, which supports students' understanding of illustration concepts in a more meaningful way. This visual experience helps students form an initial understanding of the illustration process. Nevertheless, its impact on students' creative motivation to draw has not been evenly distributed.

The analysis of students' comic strip works shows that most students are able to apply visual elements, story elements, and compositional principles, although the level of mastery varies across individuals. Variations are evident in panel arrangement, narrative clarity, character expression, and visual composition. These findings suggest that digital comics function as a visual reference that supports students' understanding of basic comic and illustration structures, yet they do not guarantee uniform quality of students' artworks.

From the teacher's perspective, digital comics serve as a supportive learning medium that is relevant to contemporary students' learning characteristics. However, the effectiveness of their implementation is influenced by the availability of supporting facilities and instructional strategies. Therefore, the integration of digital comics will be more effective when combined with appropriate teaching methods, continuous teacher guidance, and adequate digital infrastructure.

Declaration of Conflicting Interests

The author states that there is no conflict of interest in the publication of this article.

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